

Climatological Data for September, 1909.  
DISTRICT No. 7, LOWER MISSISSIPPI VALLEY.

ISAAC M. CLINE, District Editor.

GENERAL SUMMARY.

The weather during the first half of the month was warm in all portions of the district. There was an unusually warm period at the opening of the month over the western portion of the district on the 1st and 2d, and over the eastern portion on the 2d and 3d. A change to much colder took place about the 13th in the western and the 14th in the eastern portion of the district, and cool weather continued until the close of the month. The mean temperature was about normal or above, except over the western portion of the immediate Mississippi Valley and the mountainous portions of Colorado and New Mexico. Monthly mean temperatures and departures from the normal for the various States are reported as follows: Missouri area, 69.8°, -0.4°; Kansas area, 71.7°, +1.8°; Colorado area, 59.2°, -1.4°; New Mexico area, 62.6°, -2.4°; Texas area, 73.7°, +1.6°; Oklahoma, 74.5°, +1.3°; Arkansas, 74.7°, +1.5°; Tennessee area, 71.3°, -0.7°; Mississippi area, 75.2°, +0.1°; Louisiana, 77.5°, +0.2°.

The precipitation over Oklahoma and the Kansas, Colorado, New Mexico, and Texas areas occurred generally during the first half, and very little precipitation occurred during the latter half of the month. Over the eastern portion of the district, showers occurred during the first half of the month and there were general heavy rains on the 20th-21st during the passage northward of the tropical hurricane. The precipitation was above the normal over the extreme eastern and western portions of the district; elsewhere, there was a deficiency, except in scattered localities. Monthly average amounts, with departures from the normal, for the various States and parts of States, are reported as follows: Missouri area, 4 inches, +0.54 inch; Kansas area, 1.91 inches, -1 inch; Colorado area, 3.34 inches, +2.28 inches; New Mexico area, 2.94 inches, +2.21 inches; Texas area, 0.77 inch, -1.71 inches; Oklahoma, 1.17 inches, -1.88 inches; Arkansas, 2.84 inches, -0.77 inch; Tennessee area, 4.32 inches, +1.28 inches; Mississippi area, 4.12 inches, +1.34 inches; Louisiana, 4.97 inches, +1.21 inches.

TEMPERATURE.

The mean temperature was about normal, or above, over Oklahoma, the Mississippi, Tennessee, Kentucky, Kansas, and Texas areas, and the Missouri area, except in the central portion, and was below the normal elsewhere. The greatest excess in temperature, amounting to more than 3°, occurred over northeastern Oklahoma and northwestern Arkansas and the southeastern portion of the Kansas and the southwestern portion of the Missouri areas; elsewhere, the excess ranged from 0.3° to 2.7°. Over those portions of the district where the mean temperature was below the normal, the departures ranged from 2.1° in the Colorado area to 0.1° in that portion of Louisiana lying to the north of Lake Pontchartrain.

The highest monthly mean temperature was 81.4°, at Liberty Hill, Bienville Parish, La., and the lowest was 44.0°, at Lake Moraine, El Paso County, Colo. The maximum temperature for the month was above 95° throughout the district, except in the mountainous portions of the Colorado and New Mexico areas. The monthly maximum reached, or exceeded, 100° at some stations in each State in the district, and in Oklahoma, Arkansas, Louisiana, and the Texas area the maximum was above 100° at practically all stations. The highest temperature recorded in the district was 107° at Ashland, Clark County, Kans., Chickasha, Grady County, and Muskogee, Muskogee County, Okla. Maximum temperatures of 106° were recorded at a number of stations in Kansas, Oklahoma, Arkansas, and the Texas areas. The average of the daily maximums exceeded 90° in portions of Oklahoma, Arkansas, Louisiana, and

the Kansas and Texas areas. The monthly maximum temperatures occurred generally from the 1st to 3d, although in some scattered localities the maximum occurred as late as the 12th.

The monthly minimums occurred generally during the last decade, and were recorded at a majority of stations in the western portion of the district on the 22d or 23d, and in the eastern portion on the 27th or 28th. The lowest temperature recorded, 14°, occurred at Elizabethtown, Colfax County, N. Mex. Minimum temperatures of 40°, or lower, were recorded at some stations in all parts of the district, and minimums below 32° were recorded over some localities in Oklahoma and Arkansas and in the Colorado, Kansas, and Missouri areas. Killing frost occurred in the mountainous portions of Colorado and New Mexico on several dates, and in Boone and Clark counties, Ark., on the 28th. Light frost occurred on the 27th, 28th, or 29th in portions of Oklahoma and Arkansas, and the Kansas, Missouri, and Texas areas. The percentage of sunshine during the month was somewhat above the seasonal average.

PRECIPITATION BY DRAINAGE AREAS.

*Arkansas River and tributaries.*—Heavy precipitation occurred over the headwaters of the Arkansas, in Colorado, where the amounts ranged from 1.34 inches at Holly, in the plains portion, to 7.47 inches at Santa Clara near the headwaters of the Cuchara River in the elevated portion of the Colorado area and the average was 3.4 inches, being about 2.3 inches in excess of the September normal. From the Colorado line eastward to the ninety-seventh meridian, the precipitation in the Valley of the Arkansas proper, ranged generally, between 1.5 and 3 inches, the average being about 2 inches, which is about 0.3 inch below the normal. One station, Ellinwood, Kans., reported 5.70 inches and six stations reported less than 1 inch. Except in a few widely scattered localities, dry weather prevailed throughout the Cimarron Valley, the rainfall ranged from 0.40 inch to 4.05 inches, and the average for the valley was about 1.5 inches. Three stations reported an excess, and all others reported a deficiency ranging generally from 1 to 2 inches, the average being about 1 inch. Generally heavy precipitation occurred over the headwaters of the Canadian in New Mexico, but elsewhere throughout the Canadian Valley the precipitation was light. Over the part of the valley in New Mexico, the precipitation ranged generally from 2 to 5 inches, and was from 1 to 2 inches above the normal. Over the stretches of the Canadian that lie in Texas and Oklahoma, the precipitation averaged about 1 inch, and there was a deficiency of about 2 inches. The rainfall was unevenly distributed over the Verdigris and Neosho valleys and that part of the Arkansas proper between the ninety-seventh meridian and the Arkansas line; the amounts ranged from 0.02 inch to 4.63 inches, the average being about 1.5 inches, about 2 inches below the normal. Over that portion of the Arkansas Basin, in Arkansas, the precipitation averaged 1.6 inches, and was 1.7 inches below the normal. The amount increased from 0.38 inch at Fort Smith to more than 3 inches near its junction with the Mississippi.

*Red River and tributaries.*—There was less than half an inch of precipitation generally over that portion of the Red River that lies in Texas and Oklahoma, except that moderately heavy amounts were recorded in the Texas Panhandle. The amounts ranged from a trace to 2.05 inches; averaged about 0.5 inch, and the deficiency was about 2 inches. Southward, in Arkansas and Louisiana, the precipitation increased from 0.48 inch to more than 3 inches and the departures from the normal ranged from a deficiency of 2.10 inches at Texarkana, Ark., to an excess of 0.69 inch at Alexandria, Louisiana.

*Mississippi, South of St. Louis and small tributaries.*—

Throughout this drainage area, the monthly amounts of precipitation were quite uniformly distributed, and ranged from 2.51 inches to 8.36 inches; the average was about 4 inches, or 0.5 inch above the normal. There was a general excess, exceeding 2 inches, at most stations in the immediate vicinity of the Mississippi. Over the Yazoo and Big Black valleys, the precipitation ranged from 2.51 inches to 5.79 inches, the average being 3.6 inches, or about 0.9 inch above the normal. In the Valley of the Ouachita the monthly amounts ranged from 0.84 inch near the headwaters in Arkansas to 4.33 inches at the mouth in Louisiana, the average being 2.54 inches. Over the headwaters of the Meramec and over the upper portion of the drainage basin of the White the precipitation was below the normal. There was a deficiency to the east of the headwaters of the Black, and over the greater portion of the Ouachita Basin.

*Louisiana coastal plain.*—The precipitation ranged from 4 to more than 10 inches over the eastern and middle portions, and from 2.94 inches at Jennings to 4.23 inches at Lake Charles in the western portion of the coastal plain. There was an excess, except at a few scattered stations, and at several stations the excess was between 4 and 6 inches. The rainfall was heavy but mostly occurred during the tropical storm of the 20th–21st, which passed inland between New Orleans and Morgan City.

A full discussion of this storm is given elsewhere in the REVIEW.

#### RIVERS.

The Arkansas and its tributaries remained low during the month, except that there were more moderate floods at the extreme headwaters of the Arkansas and the Canadian. The damage from flood waters was comparatively small in Colorado, but over the northern half of the New Mexico area nearly every locality reported local damages and delays in railroad traffic. The lowest stage at Fort Smith, Ark., was 1.4 feet on the 1st, the highest was 6.6 feet on the 13th, and at the close of the month the stage was 2.5 feet. The changes in the Arkansas were slight at Little Rock, where the stage was 1.3 feet at the opening and 1.1 feet at the close of the month. The lowest stage during the month was 1.0 foot on the 9th, and the highest was 3.5 feet on the 17th.

The Red River fell generally during the month, except that there were a few local rises. The stage at Arthur, Tex., was 6.2 feet at the opening of the month and the water fell slowly to 4.6 feet on the 23d and 24th, after which there was a rise to 5.6 feet on the 27th, and at the close of the month the stage was 4.8 feet. The range at Fulton, Ark., was from 6.5 feet on the 1st to 4.8 feet on the 27th to 29th. The range at Shreveport was from 2.1 feet on the 1st to –4.0 feet on the 30th. The changes at Alexandria were very slight, and the range was from 0.9 foot on the 4th and 7th to –0.2 foot on the 30th. The rivers and smaller streams in Oklahoma were low, except that there was a temporary rise in the South Canadian during the latter part of the first decade. The Ouachita remained nearly stationary at Camden, and at Monroe the range was from –0.5 foot on the 1st to –2.3 feet on the 27th.

The lower Mississippi changed very little, but there was a fall generally from St. Louis southward to the Gulf. The highest stage from Memphis to Donaldsonville occurred at the opening of the month and the lowest on the 30th. Slight, but unimportant rises occurred on a few dates at New Orleans where the river oscillated to some extent as a result of wind tides. The highest stage was 7.8 feet on the 20th and the lowest 4.2 feet on the 30th.

#### NOTES.

As a result of the excessive precipitation in New Mexico during the first decade in September, the Canadian at Logan, N. Mex., rose on September 6 from 5 feet at noon to 25 feet at 6 p. m., and the crest of the flood was higher than 25 feet. The river carried more than 10,000 second-feet of water during the height of the flood.

The stages of the streams in Oklahoma were unusually low

during the month and this resulted in an inadequate water supply. The means of securing water for domestic purposes and fire protection was a serious problem in a number of the smaller cities. These conditions emphasize the necessity for action to provide for the conservation of the water supply in anticipation of such droughts.

River transportation was practically suspended on the Arkansas, the White, the Red, and the Ouachita rivers because of the low stages of those streams.

"Hot winds" occurred in the southeastern counties of Kansas on September 3.

SPECIAL REPORT ON THE HURRICANE OF SEPTEMBER 20–21, 1909, ON THE LOUISIANA AND MISSISSIPPI COASTS.

The hurricane which moved northward over Louisiana and Mississippi, September 20–21, 1909, was of the greatest geographic extent and probably the most severe storm that has been experienced on the central Gulf coast.

WEATHER CONDITIONS AT NEW ORLEANS PRECEDING AND DURING THE HURRICANE.

*September 18.*—The pressure was quite uniform, ranging from 29.91 to 29.97 inches. The wind was light with the prevailing direction northeast until 5 p. m., and east, except for a short interval, from that hour until midnight. The temperature averaged 4° above the normal and ranged from 76° to 88°. The day was partly cloudy with cirrus and cirro-stratus clouds moving from east or northeast during the greater part of the day, but occasionally from the north. Polar bands tinged with pink were observed at 7 p. m.

*September 19.*—Very little change in pressure conditions took place until the afternoon when the barometer began falling slowly; at 10 p. m. a more rapid fall set in. The temperature averaged 3° above the normal and ranged from 77° to 85°. The wind was steady from the northeast during the twenty-four hours, the velocity increased steadily from a light wind in the morning until noon, after which it blew generally at a rate of 18 to 20 miles per hour, the maximum velocity being at the rate of 28 miles per hour from the northeast at 12.55 p. m. Cirro-stratus clouds prevailed during the forenoon with some cumulus and alto-stratus during the afternoon. Rain fell at intervals commencing at 4:55 p. m. About sunset the clouds were tinged with a brilliant carmine glow lasting from 5:50 to 6:30 p. m., being most pronounced at 6:10 p. m.

*September 20.*—The barometer fell at a steady and uniform rate from 29.80 at midnight of the 19th to 29.63 at 10 a. m., after which the decrease in pressure was more pronounced and was at a uniform rate of nearly one-tenth of an inch in two hours until 7 p. m. when the lowest reading, 29.23 inches, was recorded. The lowest temperature during the day, 74°, occurred at 1 p. m., and the highest recorded during the twenty-four hours was 79°. The wind was from the northeast until 8 a. m., coming in sudden gusts ranging in velocity from 22 to 42 miles per hour, a rate of more than 30 miles per hour being recorded in some five-minute period of every hour after 1 a. m. From 8 to 9 a. m., the wind blew from all directions, not continuously from any one direction during a period of five minutes; during this hour the wind lulled and the velocity was uniformly about 16 miles per hour. From 9 to 10 a. m., the wind blew steadily from the northeast and the velocity nearly doubled over that of the preceding hour with a maximum at the rate of 40 miles per hour at 9:53 a. m. From 10 a. m. until noon the wind was variable blowing from all directions not remaining from any one direction during a period of more than five minutes. The wind lulled again during this time and the velocity ranged from 12 to 24 miles per hour. From 12 noon until 3 p. m. the wind oscillated between northeast and southeast, being mostly east, and the hourly wind velocity ranged from 25 to 33 miles per hour, the maximum for five minute periods being for each hour at the rate of 31, 37, and 40 miles, respectively. From 3 to 4 p. m., the wind was mostly from the east, but occasionally from

the southeast with increasing velocity, the total movement for the hour being 39 miles with a five-minute maximum at the rate of 46 miles per hour. From 4 until 5:20 p. m., the wind veered toward the southeast after which it remained steady from the southeast until 10:45 p. m., when it veered to the south. The wind velocity increased as the wind settled into the southeast, with an hourly movement from 4 to 5 p. m. of 45 miles, and for a five-minute period it was at the rate of 58 miles per hour; from 5 to 6 p. m. the hourly movement was 49 miles and the maximum for five minutes was at the rate of 62 miles per hour; from 6 to 7 p. m., the hourly movement was 55 miles and the maximum for five minutes was at the rate of 66 miles, this being 6 miles greater than the highest wind previously recorded at New Orleans. After 7 p. m. the wind subsided slowly, but storm velocities occurred at intervals until about midnight. The wind was freaky, blowing at all times during the day in sudden powerful gusts or blasts limited to narrow areas and requiring but a few seconds of time in passing a given place. These sudden gusts or blasts were of much greater velocity than the highest five-minute record. Low, heavy clouds, from which rain fell incessantly, moved rapidly from the northeast during the forenoon and from the east and southeast during the afternoon. The rainfall was heaviest from 12 noon to 1 p. m., when 1 inch fell, there being no other hour during the day with one-third that amount.

September 21 was clear and pleasant, with light wind from the south.

#### EFFECTS OF THE HURRICANE.

The center of the hurricane moved inland between the mouth of the Mississippi and the Atchafalaya rivers, as forecast by the Weather Bureau. The wind at Morgan City backed from the northwest, by the west, to the south, while at New Orleans it veered from the northeast, by the east, to the south. The center of the disturbance moved northward over eastern Louisiana, passing about halfway between New Orleans and Morgan City. Excessively high tides occurred in the eastern segment of the hurricane, flooding all the lowlands on the middle Gulf coast to a depth ranging from 2 to 10 feet. At New Orleans the back water in the river, as a result of the storm tide, was 4 feet on the afternoon of the 20th. The storm winds carried the water from the Gulf of Mexico northward, east of the Mississippi River over Breton Sound, eastern Plaquemines, St. Bernard, and Orleans parishes into Lake Pontchartrain, giving the highest tide water ever known in those sections. Reports from the north shore of Lake Pontchartrain indicate that the tide had risen 4 feet up to 7 p. m. on the 20th, when it remained stationary for nearly an hour. From 8 to 10 p. m. there was a storm wave of 3 feet, making a total tide in that section of 7 feet. The water commenced receding about midnight. A break in the protection levee on Bayou St. John near the Dumaine Street Bridge allowed the water from Lake Pontchartrain to flow through and flood a large area, in the western portion of New Orleans, to a depth ranging from 1 to 2 feet. The highest storm tide occurred between the mouth of the Mississippi River and the Mississippi Sound, about 50 miles east of the storm center. The occurrence of the highest tide in this part of the storm and so far from the center was, no doubt, due to the fact that the storm was moving northwest until it reached the Louisiana coast, and then curved more to the northward. Reports from Grand Isle, which was near the center of the storm, indicate a tide of about 4 feet in that section as the highest water on that island was but 2 feet. From the Atchafalaya River westward, the northerly winds held the tides down; however, the winds were high and dangerous as far west as Galveston, Tex.

Much damage resulted from the storm along the middle Gulf coast, and for some distance inland. At New Orleans five persons were killed either by falling chimneys or coming in contact with live wires broken by the wind, and the property

damage is estimated at about \$1,000,000, the greater part of which was along the river front, mainly from the sinking of barges loaded with coal. Small craft were torn from their moorings in harbors and suffered much damage.

More than half the coal fleet along the Mississippi River was sunk. The railroads suffered severe damage. The Louisville and Nashville Railroad lost 25 miles of track, and the bridges at Rigolets and at Bay St. Louis were partly destroyed. The Illinois Central Railroad lost 8 miles of double track and several bridges. Other roads suffered to some extent, but no reports of the extent of their damage has been received. Telephone and telegraph wires in all directions were prostrated, there being but one wire left in operation out of New Orleans, a telephone line to Hattiesburg, Miss. The wireless towers were all blown down. The Western Union Telegraph Company opened a wire by the way of Dallas, Tex., on the 22d and this was followed by other wires on the 23d and 24th, and on the 25th a good telegraph service was restored. The damage suffered by the railroad, telegraph, and telephone companies will probably exceed \$1,000,000. Many towns for some distances inland suffered heavy damage. Agricultural interests in Louisiana suffered less than was at first anticipated, and the damage to crops will probably not far exceed \$1,000,000. The total damage in Louisiana and Mississippi is estimated at about \$5,000,000. Nearly 200 persons are known to have perished in Terrebonne Parish and about 50 deaths occurred as a result of the storm in other portions of Louisiana and Mississippi. The exact loss of life will never be known, but a conservative estimate places the total number of deaths at about 350. Nearly 4,000 people were rendered homeless the bulk of these being in Terrebonne Parish. The coast region of Terrebonne Parish is cut up by numerous bayous, and 2,000 or 3,000 fishermen live along these sluggish streams. Houma is the nearest telephone exchange, and people living several miles south of that place are without rapid means of communication and could not be reached by warnings.

When it is taken into consideration that dangerous winds occurred from Tampa, Fla., on the east to Galveston, Tex., on the west, over a long stretch of low coast, and at New Orleans the wind velocity exceeded all previous storms, the small loss of life is phenomenal when compared with that resulting from previous storms in this section. It is a notable fact that no loss of life resulted from drowning in the neighborhood of the storm-warning display stations of the Weather Bureau, which establishes the fact that the warnings were effectual in the saving of life. Four-fifths of the deaths that resulted from the storm occurred in a portion of Terrebonne Parish that could not be reached with the warnings, and many of the remaining number resulted indirectly from the storm in a manner that no warnings could have prevented their occurrence. Under the guidance of the warnings of the Weather Bureau, all of the small craft that could be reached had sought harbors and prepared to weather the storm. The coal fleet anchored along the banks of the Mississippi kept up steam commencing Saturday night and they were advised Sunday, in conversation over the telephone, to keep in readiness for the storm. About half the fleet was sunk, but the remaining half was saved as a direct result of the action taken on the advice of the Bureau. No loss of life occurred on the high seas, because all the craft not strong enough to weather severe storms heeded the warnings and remained in port. The only casualty reported was that of the steamer *Utstein*, which was stranded in 7 feet of water just west of the Ship Shoal lighthouse. The *Utstein* was bound from Spanish Honduras for New Orleans with a cargo of fruit. None of the crew was lost. There was some loss of life on small craft that had sought refuge in the bays and bayous, but these people had sought what they deemed safe harbors. It is not possible to estimate to what extent lives and property were saved as a result of the warnings, but judging from action taken

it can safely be said that the number of lives and the amount of property saved greatly exceed the losses.

COMMENTS ON WORK OF WEATHER BUREAU.

The following comments on the warnings have been received:  
The Daily Picayune, New Orleans, La., September 22, 1909, says:

It must be said to the credit of the Weather Bureau that the excellent work done has proven of incalculable benefit to life and property by the issuance of timely warnings of the storm. On Wednesday of last week the Weather Bureau began to give out bulletins as to the location of the tropical hurricane and its probable trend, and this warning note never ceased from day to day until the crucial moment, Monday morning, when the definite warning was issued, telling about the very near approach of the disturbance threatening south Louisiana and probably having some sinister design upon the city of New Orleans. The storm reached this city about the time forecasted by the Weather Bureau, and it lasted until nearly midnight Monday.

In commenting editorially on the storm, the Daily Picayune of September 25, 1909, says:

The admirable arrangements made by the weather service insures ample warning of the approach of these West Indian storms, but there is little that can be done to protect property from their ravages. That the timely warn-

ings save many lives is, however, undoubted, and were the people who live in exposed stretches of the coast to pay greater attention to these warnings the loss of life would be still more reduced. Sailors who go to sea carefully note the weather predictions and are guided thereby, whereas the people living on the low-lying coast, who have actually more to fear than the sailors, usually pay less heed to the storm predictions.

The following extracts from letters received convey the general tenor of public feeling toward the work performed by the Bureau:

MORGAN CITY, LA., *September 24, 1909.*

The storm warnings were timely and were the means of saving life and property. Boatmen who were prepared to sail were advised and took timely warning, thus being able to save their property.

(Signed) M. COGUENHEM.

NEW ORLEANS, LA., *September 22, 1909.*

We write to express our appreciation for the excellent and courteous service which your office furnished to us during the uncertain hours of the recent storm. We feel that your office was solely instrumental in saving to New Orleans, through advices sent out by you in advance, many lives and thousands of dollars worth of property.

We can doubly assure you that many people in New Orleans were given encouragement throughout the height of the storm by information given out during its fury.

(Signed) CASTELL & TREFNEY.

TABLE 1.—Climatological data for September, 1909. District No. 7, Lower Mississippi Valley.

| Stations.         | Counties.   | Elevation, feet. | Length of record, yrs. | Temperature, in degrees Fahrenheit. |                            |                 |       |                 |       | Precipitation, in inches. |        |                            |                       | Number of rainy days, .01 inch or more. | Number of clear days. | Sky.                     |                               | Prevailing wind direction. | Observers.             |
|-------------------|-------------|------------------|------------------------|-------------------------------------|----------------------------|-----------------|-------|-----------------|-------|---------------------------|--------|----------------------------|-----------------------|---|-----------------------|--------------------------|-------------------------------|----------------------------|------------------------|
|                   |             |                  |                        | Mean.                               | Departure from the normal. | Highest.        | Date. | Lowest.         | Date. | Greatest daily range.     | Total. | Departure from the normal. | Greatest in 24 hours. |   |                       | Total snowfall unmelted. | Number of partly cloudy days. |                            |                        |
| Colorado.         |             |                  |                        |                                     |                            |                 |       |                 |       |                           |        |                            |                       |   |                       |                          |                               |                            |                        |
| Blaine.           | Baca.       | 3,935            | 17                     |                                     |                            |                 |       |                 |       |                           |        |                            |                       |   |                       |                          |                               |                            | M. M. Meyers.          |
| Buena Vista.      | Chaffee.    | 7,955            | 9                      |                                     |                            |                 |       |                 |       |                           |        |                            |                       |   |                       |                          |                               |                            | M. D. Bowen.           |
| Calhan.           | El Paso.    | 6,700            | 2                      | 56.4                                |                            | 82              | 17    | 31              | 23    | 39                        | 5.22   | + 2.63                     | 1.41                  | 0.5                                     | 12                    | 18                       | 6                             | 6                          | H. B. Rice.            |
| Canon City.       | Fremont.    | 5,329            | 21                     | 66.0                                | + 1.2                      | 93              | 2     | 39              | 23    | 39                        | 3.34   | + 3.59                     | 1.25                  | 0.0                                     | 8                     | 9                        | 17                            | 4                          | Thomas J. Tynan.       |
| Colorado Springs. | El Paso.    | 6,098            | 30                     | 57.5                                | - 1.9                      | 84              | 2     | 32              | 23    | 37                        | 4.63   |                            | 1.08                  | 0.0                                     | 10                    | 18                       | 7                             | 5                          | Colorado College.      |
| Cripple Creek.    | Teller.     | 9,396            | 9                      |                                     |                            |                 |       |                 |       |                           | 3.72   |                            | 1.16                  | 6.0                                     | 9                     |                          |                               |                            | F. G. Willis.          |
| Cuchara Camps.    | Huerfano.   | 8,200            |                        |                                     |                            |                 |       |                 |       |                           | 3.05   |                            | 0.88                  | 2.0                                     | 6                     | 23                       | 3                             | 4                          | George A. Mayes.       |
| Eads.             | Kiowa.      | 4,209            | 2                      | 67.6                                |                            | 95              | 1     | 40              | 51    | 50                        | 1.37   |                            | 1.37                  | 0.0                                     | 1                     |                          |                               |                            | W. H. Lauck.           |
| Fairview.         | Custer.     | 9,500            |                        |                                     |                            |                 |       |                 |       |                           |        |                            |                       |   |                       |                          |                               |                            | Elizabeth L. Gray.     |
| Florence.         | Fremont.    | 5,185            |                        | 68.4                                |                            | 95              | 2     | 44              | 14    | 40                        | 2.85   |                            | 1.65                  | 0.0                                     | 5                     | 23                       | 0                             | 7                          | W. G. Fish.            |
| Garfield.         | Chaffee.    | 9,510            |                        |                                     |                            |                 |       |                 |       |                           | 3.61   |                            | 2.15                  | 6.0                                     | 12                    | 11                       | 15                            | 4                          | Lloyd N. Felton.       |
| Glen Eyrie.       | El Paso.    | 6,500            | 17                     | 56.7                                | - 2.3                      | 85              | 2     | 30              | 23    | 43                        | 3.46   | + 2.38                     | 0.95                  | 0.0                                     | 9                     | 16                       | 9                             | 3                          | C. Nickell.            |
| Hamp.             | Elbert.     | 5,400            | 16                     | 55.9                                | - 2.7                      | 84              | 2     | 30              | 23    | 44                        | 2.34   | + 1.43                     | 0.66                  | 0.0                                     | 8                     | 20                       | 4                             | 6                          | W. Hamp.               |
| Hermit Lake.      | Custer.     | 10,000           |                        |                                     |                            |                 |       |                 |       |                           |        |                            |                       |   |                       |                          |                               |                            |                        |
| Hoehne (near).    | Las Animas. | 5,700            | 17                     | 59.9                                | - 2.4                      | 92              | 2     | 25              | 23    | 59                        | 3.12   | + 1.90                     | 0.80                  | 0.0                                     | 9                     | 23                       | 1                             | 6                          | S. W. DeBusk.          |
| Holly.            | Prowers.    | 3,350            | 14                     | 68.2                                | - 0.3                      | 99              | 1     | 34              | 29    | 52                        | 1.34   | + 0.12                     | 1.10                  | 0.0                                     | 4                     | 23                       | 3                             | 4                          | R. I. Arneson.         |
| Lake Moraine.     | El Paso.    | 10,265           | 15                     | 44.0                                | - 3.5                      | 66              | 2     | 19              | 22    | 32                        | 3.90   | + 2.44                     | 0.75                  | 7.8                                     | 13                    | 11                       | 11                            | 7                          | Joseph Strong.         |
| Lamar.            | Prowers.    | 3,592            | 19                     | 68.1                                | - 0.6                      | 100             | 1     | 37              | 28    | 47                        | 2.32   | + 1.10                     | 1.25                  | 0.0                                     | 4                     | 23                       | 5                             | 2                          | J. T. Lawless.         |
| Las Animas.       | Bent.       | 3,899            | 41                     | 67.0                                | + 1.3                      | 98              | 17    | 37              | 23    | 56                        | 2.72   | + 1.74                     | 1.07                  | 0.0                                     | 6                     | 17                       | 0                             | 13                         | F. M. Tague.           |
| La Veta Pass.     | Costilla.   | 9,000            |                        |                                     |                            |                 |       |                 |       |                           | 3.07   |                            | 1.22                  | 2.0                                     | 7                     | 11                       | 14                            | 5                          | Norvin B. Lively.      |
| Leadville.        | Lake.       | 10,243           | 13                     | 46.4                                | - 2.1                      | 68              | 28    | 17              | 22    | 35                        | 2.64   | + 2.13                     | 1.10                  | T.                                      | 10                    |                          | 5                             | 4                          | U. S. Weather Bureau.  |
| Limon (near).     | Elbert.     | 5,360            | 2                      | 58.3                                |                            | 87              | 17    | 32              | 23    | 44                        | 2.23   |                            | 0.62                  | 0.0                                     | 7                     | 21                       | 5                             | 4                          | John Lecher.           |
| Marshall Pass.    | Saguache.   | 10,846           | 6                      |                                     |                            |                 |       |                 |       |                           | 2.71   |                            | 1.00                  | 0.0                                     | 7                     | 18                       | 6                             | 6                          | W. D. Lillard.         |
| North Lake.       | Las Animas. | 8,700            |                        |                                     |                            |                 |       |                 |       |                           | 4.18   |                            | 1.25                  | 0.5                                     | 10                    | 17                       | 7                             | 6                          | Guy H. Crane.          |
| Pueblo.           | Pueblo.     | 4,734            | 21                     | 62.6                                | - 1.8                      | 92              | 2     | 36              | 23    | 39                        | 3.93   | + 3.55                     | 2.10                  | 0.0                                     | 7                     | 23                       | 3                             | 4                          | U. S. Weather Bureau.  |
| Rockyford (near). | Otero.      | 4,177            | 20                     |                                     |                            |                 |       |                 |       |                           |        |                            |                       |   |                       |                          |                               |                            | P. K. Blinn.           |
| St. Elmo.         | Chaffee.    | 9,500            |                        |                                     |                            |                 |       |                 |       |                           | 3.53   |                            | 1.33                  | T.                                      | 8                     | 22                       | 4                             | 4                          | Daniel Clark.          |
| Salida.           | do.         | 7,035            | 11                     | 55.8                                | - 1.4                      | 80              | 26    | 25              | 23    | 50                        | 2.74   | + 1.84                     | 1.62                  | 0.0                                     | 5                     | 20                       | 7                             | 3                          | M. D. L. Buell.        |
| Santa Clara.      | Huerfano.   | 8,250            | 14                     | 55.0                                | - 0.4                      | 81              | 1     | 29              | 23    | 41                        | 7.47   | + 5.56                     | 4.65                  | 1.0                                     | 10                    | 14                       | 12                            | 4                          | Lincoln Morris.        |
| Sheridan Lake.    | Kiowa.      | 4,065            | 8                      | 67.8                                |                            | 96              | 1     | 35              | 29    | 48                        | 2.36   |                            | 1.31                  | 0.0                                     | 5                     | 26                       | 4                             | 0                          | Howard Gamble.         |
| Stonewall.        | Las Animas. | 8,000            | 3                      |                                     |                            |                 |       |                 |       |                           | 3.84   |                            | 1.60                  | T.                                      | 7                     | 17                       | 9                             | 4                          | J. W. Shouse.          |
| Trinidad.         | do.         | 5,994            | 14                     |                                     |                            |                 |       |                 |       |                           |        |                            |                       | 0.0                                     |                       | 18                       | 7                             | 5                          | Mrs. Maggie Butler.    |
| Victor (near).    | Teller.     | 10,100           | 5                      | 50.0                                |                            | 73              | 3     | 25              | 5     | 40                        | 3.60   |                            | 0.73                  | 5.7                                     | 11                    | 19                       | 6                             | 5                          | Fred Jones.            |
| Vilas.            | Baca.       | 3,935            | 19                     |                                     |                            |                 |       |                 |       |                           | 4.59   | + 3.07                     | 2.89                  | 0.0                                     | 6                     | 19                       | 7                             | 4                          | Carrie Konkell.        |
| Westcliffe.       | Custer.     | 7,884            | 15                     | 52.6                                | - 1.5                      | 78              | 17    | 19              | 23    | 50                        | 2.30   | + 0.96                     | 1.46                  | 2.0                                     | 8                     | 13                       | 9                             | 8                          | Zack Jordan.           |
| Winfield.         | Chaffee.    | 9,765            |                        |                                     |                            |                 |       |                 |       |                           | 2.71   |                            | 1.40                  | 2.5                                     | 11                    | 7                        | 16                            | 7                          | John G. Payne.         |
| Wortman.          | Lake.       | 11,250           | 9                      |                                     |                            |                 |       |                 |       |                           | 3.77   | + 2.60                     | 1.30                  | 23.0                                    | 5                     | 20                       | 3                             | 7                          | George C. Wortman.     |
| New Mexico.       |             |                  |                        |                                     |                            |                 |       |                 |       |                           |        |                            |                       |   |                       |                          |                               |                            |                        |
| Abbott.           | Mora.       | 5,771            |                        |                                     |                            |                 |       |                 |       |                           | 3.35   |                            | 2.45                  | 0.0                                     | 3                     | 19                       | 8                             | 3                          | Agt. E. P. & S. W. Ry. |
| Albert.           | Union.      | 4,700            | 19                     | 68.7                                | - 1.0                      | 98              | 2     | 42              | 23    | 37                        | 4.86   | + 2.91                     | 2.15                  | 0.0                                     | 5                     | 23                       | 5                             | 2                          | Andrew Knell.          |
| Arch (near).      | Roosevelt.  |                  |                        | 66.5 <sup>b</sup>                   |                            | 90 <sup>a</sup> | 3     | 39 <sup>b</sup> | 27    | 40 <sup>b</sup>           |        |                            |                       |   |                       |                          |                               |                            | Wm. A. Elliott.        |
| Aurora.           | Colfax.     | 8,849            |                        |                                     |                            |                 |       |                 |       |                           | 3.81   |                            | 2.65                  | 0.0                                     | 9                     | 12                       | 12                            | 6                          | Miss Juanita Lucero.   |
| Bell Ranch.       | San Miguel. | 4,500            | 5                      | 67.6                                |                            | 98              | 2     | 37              | 27    | 50                        | 3.20   |                            | 1.71                  | 0.0                                     | 8                     | 21                       | 8                             | 1                          | C. M. O'Donel.         |
| Black Lake.       | Colfax.     | 8,348            |                        |                                     |                            |                 |       |                 |       |                           | 3.37   |                            | 1.61                  | 0.0                                     | 6                     | 20                       | 7                             | 3                          | Ralph T. Martinez.     |
| Cabesa.           | San Miguel. | 5,406            |                        |                                     |                            |                 |       |                 |       |                           | 3.45   |                            | 1.67                  | 0.0                                     | 6                     | 19                       | 7                             | 4                          | Agt. E. P. & S. W. Ry. |
| Campana.          | do.         | 4,493            |                        |                                     |                            |                 |       |                 |       |                           | 2.69   |                            | 0.87                  | 0.0                                     | 6                     | 17                       | 10                            | 3                          | Do.                    |
| Chacon.           | Mora.       | 9,000            |                        |                                     |                            |                 |       |                 |       |                           | 1.06   |                            | 0.55                  | 2.2                                     | 3                     | 20                       | 7                             | 3                          | Alfred Lucero.         |
| Cimarron (near).  | Colfax.     | 6,395            | 4                      | 59.1                                |                            | 86              | 17    | 32              | 23    | 43                        | 3.74   |                            | 3.26                  | 0.0                                     | 7                     | 17                       | 7                             | 6                          | Wm. French.            |
| Clayton.          | Union.      | 5,178            | 5                      | 65.0                                |                            | 95              | 1     | 37              | 23    | 34                        | 2.06   |                            | 1.02                  | 0.0                                     | 3                     | 22                       | 7                             | 1                          | Dr. W. W. Chilton.     |
| Cuervo.           | Guadalupe.  | 4,849            |                        |                                     |                            |                 |       |                 |       |                           | 1.14   |                            | 0.30                  | 0.0                                     | 7                     |                          |                               |                            | Agt. E. P. & S. W. Ry. |
| Dawson.           | Colfax.     | 6,396            |                        |                                     |                            |                 |       |                 |       |                           | 2.30   |                            | 2.20                  | 0.0                                     | 4                     | 18                       | 4                             | 8                          | Do.                    |
| Dorsey (near).    | do.         | 6,000            | 8                      |                                     |                            |                 |       |                 |       |                           |        |                            |                       |   |                       |                          |                               |                            | Geo T. Lambert.        |
| Elizabethtown.    | do.         | 8,465            | 3                      | 49.4                                |                            | 75              | 2     | 14              | 23    | 52                        | 0.99   |                            | 0.82                  | T.                                      | 4                     | 20                       | 7                             | 3                          | Miss Mabel Carrington. |
| Fort Union.       | Mora.       | 6,835            | 40                     | 55.8                                | - 5.0                      | 85              | 2     | 26              | 23    | 48                        | 3.37   | + 1.03                     | 1.45                  | 0.0                                     | 6                     | 22                       | 6                             | 2                          | M. C. Needham.         |
| Hayden.           | Union.      | 4,444            |                        | 66.2                                |                            | 91              | 9     | 40              | 23    | 40                        | 2.53   |                            | 1.67                  | 0.0                                     | 3                     | 21                       | 5                             | 4                          | George L. Cook.        |
| Lake Alice.       | Colfax.     | 7,160            |                        |                                     |                            |                 |       |                 |       |                           | 4.03   |                            | 1.00                  | 0.0                                     | 6                     |                          |                               |                            | Raton Water Co.        |
| Logan.            | Quay.       | 3,551            | 3                      | 69.5                                |                            | 98              | 17    | 37              | 28    | 52                        | 2.43   |                            | 1.20                  | 0.0                                     | 5                     | 22                       | 7                             | 1                          | John B. Reneau.        |
| Los Alamos.       | San Miguel. | 6,789            | 5                      |                                     |                            |                 |       |                 |       |                           | 2.56   |                            | 1.16                  | 0.0                                     | 4                     |                          |                               |                            | Wm. Frank, sr.         |
| Maxwell (near).   | Colfax.     | 5,894            | 3                      |                                     |                            |                 |       |                 |       |                           | 3.55   |                            | 1.47                  | 0.0                                     | 7                     |                          |                               |                            | D. N. Jackson.         |
| Melrose.          | Curry.      | 4,400            | 1                      | 66.8                                |                            | 92              | 27    | 35              | 28    | 48                        | 2.11   |                            | 0.90                  | 0.0                                     | 4                     | 25                       | 2                             | 3                          | Dr. F. A. White.       |
| Miami Ranch.      | Colfax.     | 6,000            | 2                      | 58.8 <sup>b</sup>                   |                            | 87 <sup>b</sup> | 2     | 28 <sup>b</sup> | 23    | 45 <sup>b</sup>           | 4.23   |                            | 3.33                  | 0.0                                     | 5                     | 17                       | 10                            | 3                          | Farmers' Devel. Co.    |
| Montoya.          | Quay.       | 4,335            |                        |                                     |                            |                 |       |                 |       |                           | 2.13   |                            | 1.46                  | 0.0                                     | 4                     | 27                       | 0                             | 3                          | Agt. E. P. & S. W. Ry. |
| Nara Visa.        | do.         | 4,225            | 4                      | 66.6 <sup>b</sup>                   |                            | 93              | 3     | 43              | 23    | 38                        | 2.19   |                            | 0.85                  | 0.0                                     | 6                     | 21                       | 6                             | 3                          | Willard Belknap.       |
| Raton.            | Colfax.     | 8,660            | 12                     | 60.0                                | - 1.2                      | 88              | 17    | 32              | 23    | 41                        | 6.30   | + 4.49                     | 2.40                  | 0.0                                     | 10                    | 21                       | 8                             | 1                          | Prof. R. C. Crum.      |
| Rociado.          | San Miguel. | 8,200            | 6                      | 54.6                                |                            | 80              | 1     | 27              | 27    | 47                        | 2.06   |                            | 1.27                  | 0.0                                     | 4                     | 17                       | 9                             | 4                          | Chas. F. Rudolph.      |
| Roy.              | Mora.       | 5,884            |                        |                                     |                            |                 |       |                 |       |                           | 5.26   |                            | 4.06                  | 0.0                                     | 5                     | 14                       | 0                             | 6                          | Agt. E. P. & S. W. Ry. |
| San Jon.          | Quay.       | 4,200            | 3                      | 68.4                                |                            | 96              | 2     | 38              | 23    | 40                        | 1.94   |                            | 0.84                  | 0.0                                     | 6                     | 24                       | 2                             | 4                          | Jessie T. White.       |
| Salano (1).       | Mora.       | 5,622            |                        | 63.2                                |                            | 91              | 2     | 34              | 23    | 41                        | 4.15   |                            | 2.30                  | 0.0                                     | 6                     | 22                       | 4                             | 4                          | F. M. Hughes.          |
| Salano (2).       | do.         | 5,622            |                        |                                     |                            |                 |       |                 |       |                           | 4.06   |                            | 2.30                  | 0.0                                     | 4                     | 15                       | 12                            | 3                          | Agt. E. P. & S. W. Ry. |
| Springer.         | Colfax.     | 5,857            | 14                     | 60.2 <sup>a</sup>                   | - 2.6                      | 90 <sup>a</sup> | 17    | 30 <sup>a</sup> | 23    | 50 <sup>a</sup>           | 2.50   | + 1.09                     | 1.80                  | 0.0                                     | 4                     | 21                       | 7                             | 2                          | Agt. A. T. & S. F. Ry. |
| Taylor.           | do.         | 5,661            |                        |                                     |                            |                 |       |                 |       |                           | 3.65   |                            | 2.00                  | 0.0                                     | 5                     | 20                       | 5                             | 5                          | Agt. E. P. & S. W. Ry. |
| Tremontina.       | San Miguel. |                  | 2                      |                                     |                            |                 |       |                 |       |                           | 5.67   |                            | 3.80                  | 0.0                                     | 6                     | 18                       | 11                            | 1                          | Miss Alice Blake.      |
| Tucumcari (1).    | Quay.       | 4,194            | 5                      | 71.1                                |                            | 97              | 2     | 40              | 23    | 42                        | 0.85   |                            | 0.42                  | 0.0                                     | 4                     | 25                       | 5                             | 0                          | John F. Seaman.        |
| Tucumcari (2).    | do.         | 4,194            |                        |                                     |                            |                 |       |                 |       |                           |        |                            |                       |   |                       |                          |                               |                            |                        |

TABLE 1.—Climatological data for September, 1909. District No. 7—Continued.

| Stations.        | Counties.  | Elevation, feet. | Length of record, yrs. | Temperature, in degrees Fahrenheit. |                            |                  |       |                 |       | Precipitation, in inches. |        |                            |                       | Sky.                     |   |                       |                               | Prevailing wind direction. | Observers.             |
|------------------|------------|------------------|------------------------|-------------------------------------|----------------------------|------------------|-------|-----------------|-------|---------------------------|--------|----------------------------|-----------------------|--------------------------|---|-----------------------|-------------------------------|----------------------------|------------------------|
|                  |            |                  |                        | Mean.                               | Departure from the normal. | Highest.         | Date. | Lowest.         | Date. | Greatest daily range.     | Total. | Departure from the normal. | Greatest in 24 hours. | Total snowfall unmelted. | Number of rainy days, .01 inch or more. | Number of clear days. | Number of partly cloudy days. |                            |                        |
| Texas—Cont'd.    |            |                  |                        |                                     |                            |                  |       |                 |       |                           |        |                            |                       |                          |   |                       |                               |                            |                        |
| Ochiltree        | Ochiltree  |                  | 1                      |                                     |                            |                  |       |                 |       |                           | 0.86   |                            | 0.50                  | 0.0                      | 3                                       |                       |                               |                            | S. T. Allen.           |
| Pampa            | Gray       | 3,226            | 7                      | 70.6                                |                            | 97               | 11    | 40              | 15    | 45                        | 0.50   |                            | 0.38                  | 0.0                      | 3                                       |                       |                               |                            | B. E. Finley.          |
| Paris            | Lamar      | 592              | 20                     | 79.0                                | + 2.7                      | 106              | 11    | 46              | 28    | 45                        | 0.48   | - 1.93                     | 0.36                  | 0.0                      | 3                                       | 20                    | 3                             | 7                          | N. O. Enloe.           |
| Plemons          | Hutchinson |                  | 2                      | 68.6                                |                            | 100              | 2     | 35              | 23    | 53                        | 1.14   |                            | 0.61                  | 0.0                      | 5                                       | 32                    | 8                             | 0                          | C. S. Solomon.         |
| Quanah           | Hardeman   | 1,563            | 4                      | 76.0                                |                            | 101              | 10    | 46              | 27    | 36                        | T.     |                            | T.                    | 0.0                      | 0                                       | 27                    | 0                             | 3                          | E. E. Miller.          |
| Sherman          | Grayson    | 745              | 16                     | 78.2                                | + 0.7                      | 100              | 10    | 50              | 28    | 31                        | 0.90   | - 1.02                     | 0.90                  | 0.0                      | 1                                       | 23                    | 6                             | 1                          | R. A. Gibbs.           |
| Sulphur Springs  | Hopkins    | 530              | 17                     | 79.2                                | + 1.3                      | 103              | 10    | 41              | 28    | 40                        | 0.61   | - 2.24                     | 0.54                  | 0.0                      | 2                                       | 30                    | 9                             | 1                          | W. B. Baxter.          |
| Tedline          | Dallam     | 4,694            | 4                      |                                     |                            |                  |       |                 |       |                           |        |                            |                       |                          |   |                       |                               |                            | Agt. Ft. W. & D. C. Ry |
| Tulia            | Swisher    | 3,501            | 11                     | 70.2                                |                            | 102              | 9     | 37              | 29    | 50                        | 0.80   | - 2.08                     | 0.60                  | 0.0                      | 1                                       | 15                    | 15                            | 0                          | Lou Mulhall.           |
| Wichita Falls    | Wichita    | 958              | 4                      |                                     |                            |                  |       |                 |       |                           | 0.50   |                            | 0.50                  | 0.0                      | 1                                       | 22                    | 0                             | 8                          | J. B. Nicholson.       |
| Kansas.          |            |                  |                        |                                     |                            |                  |       |                 |       |                           |        |                            |                       |                          |   |                       |                               |                            |                        |
| Anthony          | Harper     | 1,329            | 12                     | 73.4                                |                            | 104              | 3     | 35              | 28    | 49                        | 2.19   | - 0.19                     | 2.04                  | 0.0                      | 2                                       | 19                    | 10                            | 1                          | R. H. Beebe.           |
| Ashtland         | Clark      | 1,951            | 2                      | 73.6                                |                            | 107              | 2     | 37              | 28    | 50                        | 2.57   |                            | 1.92                  | 0.0                      | 6                                       | 24                    | 6                             | 0                          | C. W. Carson.          |
| Burlington       | Coffey     | 1,010            | 16                     | 71.6                                | + 1.0                      | 100              | 11    | 36              | 27    | 43                        | 1.40   | - 2.89                     | 0.77                  | 0.0                      | 7                                       | 16                    | 12                            | 2                          | A. W. Maxwell.         |
| Chanute          | Neosho     | 940              | 5                      | 73.2                                |                            | 105              | 11    | 34              | 28    | 42                        | 1.00   |                            | 1.00                  | 0.0                      | 1                                       | 20                    | 7                             | 3                          | Chase W. Brown.        |
| Cimarron         | Gray       | 2,700            | 3                      |                                     |                            | 97               | 11    | 37              | 29    | 49                        | 1.20   |                            | 1.20                  | 0.0                      | 1                                       | 18                    | 4                             | 3                          | Fred Mallonee.         |
| Coldwater        | Comanche   | 2,090            | 11                     | 72.8                                | + 1.4                      | 103              | 2     | 41              | 28    | 42                        | 2.98   | + 0.72                     | 2.27                  | 0.0                      | 7                                       | 22                    | 5                             | 3                          | J. L. Stanley.         |
| Columbus         | Cherokee   | 893              | 19                     | 72.7                                | + 1.7                      | 103              | 3     | 37              | 27    | 40                        | 1.64   | - 2.35                     | 0.58                  | 0.0                      | 7                                       | 21                    | 8                             | 1                          | O. E. Skinner.         |
| Coolidge         | Hamilton   | 3,346            | 13                     | 66.7                                | - 0.3                      | 95               | 2     | 32              | 29    | 54                        | 1.58   | + 0.08                     | 1.38                  | 0.0                      | 2                                       | 30                    | 5                             | 5                          | W. R. Padley.          |
| Cottonwood Falls | Chase      | 1,234            | 5                      | 71.0                                |                            | 99               | 12    | 34              | 28    | 47                        | 0.63   |                            | 0.32                  | 0.0                      | 7                                       | 21                    | 4                             | 5                          | E. B. Greene.          |
| Council Grove    | Morris     | 1,191            |                        | 68.2                                |                            | 96               | 13    | 32              | 28    | 48                        | 1.09   |                            | 1.06                  | 0.0                      | 3                                       | 26                    | 0                             | 4                          | Geo. W. Cleek, jr.     |
| Cunningham       | Kingman    | 1,680            | 21                     | 73.4                                | + 2.6                      | 105              | 2     | 38              | 27    | 48                        | 3.70   | + 1.08                     | 3.30                  | 0.0                      | 3                                       | 16                    | 11                            | 3                          | W. H. Morton.          |
| Dodge City       | Ford       | 2,513            | 35                     | 70.2                                | + 2.0                      | 100              | 3     | 45              | 27    | 38                        | 1.50   | - 0.27                     | 0.87                  | 0.0                      | 6                                       | 19                    | 9                             | 2                          | U. S. Weather Bureau   |
| El Dorado        | Butler     | 1,291            | 7                      | 71.6                                |                            | 98               | 11    | 34              | 28    | 44                        | 0.88   |                            | 0.86                  | 0.0                      | 2                                       | 27                    | 3                             | 0                          | W. Y. Miller.          |
| Ellinwood        | Barton     | 1,788            | 15                     | 71.0                                | + 2.0                      | 98               | 11    | 40              | 28    | 47                        | 5.70   | + 3.18                     | 3.47                  | 0.0                      | 10                                      | 11                    | 15                            | 4                          | Martin Musil.          |
| Emporia          | Lyon       | 1,138            | 25                     | 71.6                                | + 3.5                      | 99               | 11    | 38              | 28    | 42                        | 0.92   | - 3.00                     | 0.50                  | 0.0                      | 3                                       | 18                    | 11                            | 1                          | W. H. Boyles.          |
| Eureka           | Greenwood  | 1,093            | 11                     | 72.0                                |                            | 99               | 3     | 35              | 27    | 43                        | 0.98   | - 3.17                     | 0.92                  | 0.0                      | 2                                       | 22                    | 5                             | 3                          | T. C. Peffer.          |
| Fall River       | do.        | 925              | 13                     | 72.7                                | + 3.5                      | 105              | 3     | 32              | 28    | 51                        | 1.16   | - 3.20                     | 0.70                  | 0.0                      | 3                                       | 26                    | 3                             | 1                          | J. McDaniel.           |
| Fargo            | Seward     |                  |                        |                                     |                            |                  |       |                 |       |                           | 1.50   |                            | 1.01                  | 0.0                      | 4                                       | 14                    | 11                            | 5                          | Frank Swink.           |
| Fredonia         | Wilson     | 864              | 6                      | 74.4                                |                            | 103              | 3     | 39              | 27    | 43                        | 1.75   |                            | 0.70                  | 0.0                      | 5                                       | 23                    | 5                             | 2                          | B. W. Holmes.          |
| Garden City      | Finney     | 2,836            | 15                     | 69.6                                | + 0.2                      | 100              | 1     | 38              | 29    | 45                        | 1.20   | - 0.76                     | 0.80                  | 0.0                      | 3                                       | 21                    | 5                             | 4                          | B. F. Stocks.          |
| Great Bend       | Barton     | 1,850            |                        |                                     |                            |                  |       |                 |       |                           |        |                            |                       |                          |   |                       |                               |                            | J. A. Pritchard.       |
| Greensburg       | Kiowa      | 2,335            | 2                      | 70.4                                |                            | 101              | 3     | 39              | 27    | 41                        | 3.17   |                            | 2.05                  | 0.0                      | 6                                       | 20                    | 10                            | 0                          | C. C. Raymond.         |
| Grenola          | Elk        | 1,116            | 22                     | 71.6                                | + 1.3                      | 99               | 3     | 35              | 28    | 46                        | 2.23   | - 1.45                     | 2.10                  | 0.0                      | 3                                       | 24                    | 4                             | 2                          | R. M. Lawyer.          |
| Howard           | do.        | 1,112            | 2                      |                                     |                            |                  |       |                 |       |                           | 3.24   |                            | 2.79                  | 0.0                      | 2                                       | 26                    | 0                             | 4                          | J. W. Eby.             |
| Hugoton          | Stevens    |                  | 5                      | 69.9                                |                            | 100              | 11    | 33              | 27    | 44                        | 0.40   | - 1.61                     | 0.40                  | 0.0                      | 1                                       | 22                    | 0                             | 8                          | J. A. Firmin.          |
| Hutchinson       | Reno       | 1,535            | 19                     | 71.8                                | + 1.5                      | 100              | 2     | 33              | 28    | 52                        | 1.03   | - 1.95                     | 0.83                  | 0.0                      | 6                                       | 22                    | 5                             | 3                          | E. S. Webster.         |
| Independence     | Montgomery | 816              | 37                     | 74.1                                | + 1.9                      | 102              | 3     | 41              | 28    | 42                        | 4.63   | + 0.85                     | 1.45                  | 0.0                      | 6                                       | 19                    | 4                             | 7                          | J. M. Altaffer.        |
| Iola             | Allen      | 934              | 3                      | 71.8                                |                            | 99               | 11    | 36              | 28    | 42                        | 1.72   |                            | 1.05                  | 0.0                      | 5                                       | 15                    | 11                            | 4                          | U. S. Weather Bureau.  |
| Jetmore          | Hodgeman   | 2,268            | 8                      | 70.0                                |                            | 99               | 3     | 40              | 24    | 47                        | 3.25   |                            | 1.85                  | 0.0                      | 6                                       | 15                    | 11                            | 4                          | James Alkin.           |
| Kingman          | Kingman    | 1,504            | 1                      | 72.6                                |                            | 102              | 2     | 36              | 28    | 48                        | 1.73   |                            | 1.61                  | 0.0                      | 2                                       | 13                    | 15                            | 2                          | B. B. Anawalt.         |
| La Crosse        | Rush       | 2,061            | 7                      | 71.6 <sup>d</sup>                   |                            | 102 <sup>d</sup> | 11    | 39 <sup>d</sup> | 24    | 45 <sup>d</sup>           | 3.26   |                            | 3.10                  | 0.0                      | 5                                       | 22                    | 5                             | 3                          | Rodney Torrey.         |
| Lakin            | Kearney    | 2,903            | 19                     | 67.4                                | - 0.9                      | 99               | 1     | 35              | 28    | 54                        | 0.50   | - 1.36                     | 0.48                  | 0.0                      | 2                                       | 20                    | 6                             | 4                          | C. H. Longstreth.      |
| Larned           | Pawnee     | 2,090            | 5                      | 70.8                                |                            | 97               | 3     | 39              | 26    | 45                        | 3.83   |                            | 2.26                  | 0.0                      | 6                                       | 19                    | 10                            | 1                          | H. H. Wolcott.         |
| Lebo             | Coffey     | 1,138            | 23                     | 70.4                                | + 0.8                      | 96               | 11    | 40              | 27    | 38                        | 3.17   | - 1.07                     | 2.65                  | 0.0                      | 6                                       | 18                    | 7                             | 5                          | J. J. Bowman.          |
| Liberal          | do.        | 990              |                        |                                     |                            |                  |       |                 |       |                           | 1.96   |                            | 0.97                  | 0.0                      | 4                                       | 21                    | 2                             | 7                          | F. W. Schmitt.         |
| Liberal          | Seward     | 2,843            | 2                      | 71.8                                |                            | 104              | 2     | 39              | 27    | 50                        | 2.95   |                            | 1.28                  | 0.0                      | 5                                       | 20                    | 3                             | 7                          | R. T. Nichols.         |
| Maoksville       | Stafford   | 2,032            | 16                     | 70.7                                | + 2.0                      | 99               | 3     | 41              | 28    | 45                        | 3.34   | + 1.13                     | 2.60                  | 0.0                      | 4                                       | 18                    | 4                             | 8                          | Mrs. Nella Poling.     |
| McPherson        | McPherson  | 1,495            | 19                     | 72.0                                | + 1.9                      | 101              | 11    | 40              | 28    | 47                        | 1.07   | - 2.49                     | 0.61                  | 0.0                      | 4                                       | 17                    | 8                             | 5                          | Ed. F. Haberlein.      |
| Madison          | Greenwood  | 1,074            | 8                      | 71.5 <sup>d</sup>                   |                            | 100 <sup>d</sup> | 12    | 31 <sup>d</sup> | 29    | 60 <sup>d</sup>           | 0.65   |                            | 0.60                  | 0.0                      | 2                                       | 16                    | 13                            | 0                          | C. A. David.           |
| Marion           | Marion     | 1,310            | 15                     | 70.6                                | + 1.8                      | 99               | 11    | 35              | 28    | 46                        | 0.64   | - 2.64                     | 0.46                  | 0.0                      | 5                                       | 14                    | 16                            | 0                          | D. D. McIntosh.        |
| Medicine Lodge   | Barber     | 1,475            | 16                     | 72.2                                | + 1.2                      | 106              | 3     | 31              | 28    | 56                        | 1.67   | - 1.21                     | 1.10                  | 0.0                      | 3                                       | 21                    | 8                             | 1                          | S. P. Garrison.        |
| Medora           | Reno       | 1,480            |                        |                                     |                            |                  |       |                 |       |                           |        |                            |                       |                          |   |                       |                               |                            | M. L. Rickenbrode.     |
| Mt. Hope         | Sedgwick   | 1,410            | 12                     |                                     |                            |                  |       |                 |       |                           | 1.70   | - 0.94                     | 1.63                  | 0.0                      | 2                                       | 18                    | 11                            | 1                          | H. N. Renfrew.         |
| Neosho Rapids    | Lyon       | 1,092            | 4                      |                                     |                            |                  |       |                 |       |                           | 2.17   |                            | 2.05                  | 0.0                      | 3                                       | 24                    | 0                             | 6                          | J. E. McLeod.          |
| Ness City        | Ness       | 2,260            | 12                     |                                     |                            |                  |       |                 |       |                           |        |                            |                       |                          |   |                       |                               |                            | J. K. Barnd.           |
| Newton           | Harvey     | 1,454            | 12                     |                                     |                            | 101              | 11    | 34              | 28    | 53                        | 0.77   | - 2.52                     | 0.50                  | 0.0                      | 5                                       | 25                    | 5                             | 0                          | C. F. Walden.          |
| Nowich           | Kingman    | 1,496            | 13                     | 74.6                                | + 3.2                      | 102              | 3     | 40              | 27    | 41                        | 1.13   | - 1.52                     | 0.77                  | 0.0                      | 4                                       | 15                    | 15                            | 0                          | N. I. Farris.          |
| Nowich           | Labette    | 1,399            | 18                     | 75.0                                | + 3.0                      | 103              | 3     | 38              | 28    | 42                        | 1.12   | - 2.50                     | 0.67                  | 0.0                      | 3                                       | 16                    | 13                            | 1                          | Jas. M. Curran.        |
| Oswego           | Pratt      | 1,850            | 14                     | 70.2                                | + 1.8                      | 104 <sup>b</sup> | 2     | 37              | 27    | 44 <sup>b</sup>           | 2.40   | + 0.04                     | 2.25                  | 0.0                      | 2                                       | 21                    | 8                             | 1                          | E. H. Ellsworth.       |
| Rome             | Sumner     | 1,213            | 12                     | 71.2                                | + 0.2                      | 96               | 3     | 30              | 28    | 50                        | 1.83   | - 0.70                     | 1.77                  | 0.0                      | 2                                       | 24                    | 4                             | 2                          | D. M. Adams.           |
| Sedan            | Chautauqua | 834              | 24                     | 72.0                                | + 0.3                      | 101              | 4     | 34              | 28    | 55                        | 2.43   | - 1.06                     | 1.80                  | 0.0                      | 3                                       | 22                    | 4                             | 4                          | A. Y. Buckles.         |
| Toronto          | Woodson    | 1,040            | 12                     | 72.8                                | + 1.7                      | 101              | 3     | 33              | 28    | 56                        | 1.70   | - 3.68                     | 0.90                  | 0.0                      | 3                                       | 23                    | 0                             | 7                          | M. A. Webb.            |
| Ulysses          | Grant      | 3,027            | 15                     | 68.6 <sup>a</sup>                   | - 0.7                      | 100 <sup>a</sup> | 1     | 40 <sup>a</sup> | 27    | 48 <sup>a</sup>           | 0.60   | - 1.21                     | 0.40                  | 0.0                      | 2                                       | 21                    | 5                             | 4                          | T. W. Marshall.        |
| Winnet           | Crawford   | 940              | 7                      | 74.2                                |                            | 104              | 3     | 36              | 28    | 43                        | 1.42   |                            | 0.77                  | 0.0                      | 3                                       | 25                    | 5                             | 0                          | R. C. Harlan.          |
| Wichita          | Sedgwick   | 1,377            | 22                     | 72.5                                | + 2.7                      | 96               | 3     | 44              | 27    | 36                        | 1.77   | - 1.86                     | 1.60                  | 0.0                      | 3                                       | 16                    | 11                            | 3                          | U. S. Weather Bureau.  |
| Winfield         | Cowley     | 1,124            | 12                     | 70.6                                | - 0.1                      | 96               | 3     | 35              | 28    | 40                        | 3.35   | + 0.11                     | 3.25                  | 0.0                      | 2                                       | 23                    | 3                             | 4                          | M. B. Light.           |
| Yates Center     | Woodson    | 1,068            | 16                     |                                     |                            |                  |       |                 |       |                           |        |                            |                       |                          |   |                       |                               |                            | J. W. Tipton.          |
| Oklahoma.        |            |                  |                        |                                     |                            |                  |       |                 |       |                           |        |                            |                       |                          |   |                       |                               |                            |                        |
| Ada              | Pontotoc   | 1,001            | 3                      |                                     |                            |                  |       |                 |       |                           |        |                            |                       |                          |   |                       |                               |                            | Dr. J. P. McKinley.    |
| Apache           | Caddo      |                  | 1                      | 75.0 <sup>a</sup>                   |                            | 104              | 10    | 37 <sup>a</sup> | 28    | 46                        | 2.05</ |                            |                       |                          |   |                       |                               |                            |                        |



TABLE 1.—Climatological data for September, 1909. District No. 7—Continued.

| Stations.          | Counties.      | Elevation, feet. | Length of record, yrs. | Temperature, in degrees Fahrenheit. |                            |          |       |         |       | Precipitation, in inches. |        |                            |                       | Sky.                      |                                      |                       |                               | Prevailing wind direction. | Observers. |                        |
|--------------------|----------------|------------------|------------------------|-------------------------------------|----------------------------|----------|-------|---------|-------|---------------------------|--------|----------------------------|-----------------------|---------------------------|--------------------------------------|-----------------------|-------------------------------|----------------------------|------------|------------------------|
|                    |                |                  |                        | Mean.                               | Departure from the normal. | Highest. | Date. | Lowest. | Date. | Greatest daily range.     | Total. | Departure from the normal. | Greatest in 24 hours. | Total snowfall unmelting. | Number rainy days, .01 inch or more. | Number of clear days. | Number of partly cloudy days. |                            |            | Number of cloudy days. |
| Oklahoma—Cont'd.   |                |                  |                        |                                     |                            |          |       |         |       |                           |        |                            |                       |                           |                                      |                       |                               |                            |            |                        |
| Hennessey          | Kingfisher     | 1,166            | 15                     | 75.6                                | + 1.5                      | 106      | 10    | 41      | 38    | 51                        | 0.82   | - 2.18                     | 0.68                  | 0.0                       | 3                                    | 19                    | 11                            | 0                          | s.         | W. W. Parks.           |
| Hobart             | Kiowa          | 1,366            | 6                      | 75.2                                |                            | 102      | 1     | 41      | 23    | 37                        | 0.81   |                            | 0.46                  | 0.0                       | 3                                    | 23                    | 6                             | 1                          | s.         | Roy Benedict.          |
| Holdenville        | Hughes         | 900              | 9                      | 74.6                                | + 0.8                      | 103      | 11    | 38      | 28    | 51                        | 1.11   | - 3.38                     | 0.60                  | 0.0                       | 3                                    | 25                    | 5                             | 0                          | s.         | Miss M. Rutherford.    |
| Hooker             | Texas          | 2,999            | 4                      | 68.9                                |                            | 100      | 2     | 38      | 28    | 45                        | 1.56   |                            | 0.71                  | 0.0                       | 3                                    | 18                    | 2                             | 10                         | s.         | J. N. Kelly.           |
| Hurley             | Cimarron       |                  | 1                      | 65.5                                |                            | 98       | 2     | 38      | 22    | 41                        | 1.40   |                            | 1.20                  | 0.0                       | 2                                    | 19                    | 4                             | 7                          | sw.        | C. W. Myers.           |
| Idabel             | McCurtain      | 474              | 3                      |                                     |                            |          |       |         |       |                           |        |                            |                       |                           |                                      |                       |                               |                            |            | Dr. W. B. McCaskill.   |
| Jefferson          | Grant          | 1,062            | 16                     | 72.5                                | - 0.8                      | 96       | 3     | 33      | 38    | 47                        | 1.45   | - 1.16                     | 0.50                  | 0.0                       | 4                                    | 26                    | 3                             | 1                          | s.         | J. M. Maddy.           |
| Kenton             | Cimarron       | 4,000            | 10                     | 67.7                                | - 0.5                      | 99       | 2     | 36      | 23    | 44                        | 1.26   | - 0.60                     | 0.52                  | 0.0                       | 4                                    | 22                    | 3                             | 5                          | s.         | L. A. Wikoff.          |
| Kingfisher         | Kingfisher     | 1,046            | 12                     | 75.5                                | + 1.5                      | 104      | 10    | 33      | 28    | 52                        | 1.61   | - 1.84                     | 0.92                  | 0.0                       | 2                                    | 20                    | 10                            | 0                          | s.         | J. C. Cross.           |
| McAlester          | Pittsburg      | 698              | 17                     |                                     |                            |          |       |         |       |                           |        |                            |                       |                           |                                      |                       |                               |                            |            | Wm. Noble.             |
| McComb             | Pottawatomie   | 1,200            | 15                     | 75.8                                | + 2.3                      | 102      | 11    | 37      | 38    | 48                        | 0.26   | - 2.71                     | 0.26                  | 0.0                       | 1                                    | 21                    | 9                             | 0                          | s.         | Jas. E. McNair.        |
| Mangum             | Greer          | 1,555            | 17                     | 73.7                                | - 0.7                      | 101      | 10    | 40      | 38    | 49                        | 0.80   | - 1.62                     | 0.73                  | 0.0                       | 2                                    | 28                    | 0                             | 2                          | s.         | Wade N. Johnson.       |
| Marlow             | Stephens       | 1,292            | 9                      | 76.5                                | + 2.7                      | 102      | 11    | 45      | 38    | 41                        | 0.14   | - 3.40                     | 0.14                  | 0.0                       | 1                                    | 27                    | 0                             | 3                          | ne.        | W. B. Anthony.         |
| Meeker             | Lincoln        | 1,030            | 16                     | 74.6                                | + 0.2                      | 104      | 11    | 32      | 28    | 52                        | 0.56   | - 1.94                     | 0.55                  | 0.0                       | 2                                    | 28                    | 0                             | 2                          | s.         | Dr. John H. Baugh.     |
| Muskogee           | Muskogee       | 614              | 11                     | 77.1                                | + 3.4                      | 107      | 11    | 41      | 27    | 43                        | 0.71   | - 2.33                     | 0.42                  | 0.0                       | 2                                    | 19                    | 11                            | 0                          | se.        | Prof. E. N. Collette.  |
| Mutual             | Woodward       |                  | 3                      | 74.2                                |                            | 106      | 4     | 36      | 28    | 51                        | 0.95   |                            | 0.95                  | 0.0                       | 1                                    | 28                    | 0                             | 2                          | s.         | Thos. Martin.          |
| Neola              | Caddo          | 1,500            | 4                      | 75.2                                |                            | 102      | 10    | 41      | 38    | 43                        | 1.93   |                            | 1.91                  | 0.0                       | 2                                    | 27                    | 2                             | 1                          | se.        | R. M. Schooling.       |
| Newkirk            | Kay            | 1,149            | 13                     | 75.3                                | + 2.1                      | 101      | 3     | 42      | 36    | 42                        | 2.32   | - 0.88                     | 1.92                  | 0.0                       | 2                                    | 20                    | 10                            | 0                          | s.         | P. H. Allright & Co.   |
| Norman             | Cleveland      | 1,171            | 16                     | 75.0                                | + 0.4                      | 101      | 10    | 36      | 28    | 50                        | 0.81   | - 1.80                     | 0.23                  | 0.0                       | 6                                    | 15                    | 15                            | 0                          | s.         | Walter H. Meier.       |
| Okeene             | Blaine         | 1,194            | 6                      | 75.1                                |                            | 106      | 10    | 38      | 28    | 45                        | 0.83   |                            | 0.61                  | 0.0                       | 3                                    | 23                    | 6                             | 1                          | s.         | Dr. L. H. Murdock.     |
| Oklahoma           | Oklahoma       | 1,247            | 20                     | 74.9                                | + 2.8                      | 100      | 11    | 43      | 37    | 37                        | 0.53   | - 2.22                     | 0.46                  | 0.0                       | 4                                    | 20                    | 4                             | 5                          | s.         | U. S. Weather Bureau.  |
| Okmulgee           | Okmulgee       | 752              | 7                      | 76.4                                |                            | 105      | 11    | 33      | 38    | 54                        | 0.04   |                            | 0.04                  | 0.0                       | 1                                    | 24                    | 4                             | 2                          | s.         | J. L. Maynard.         |
| Paula Valley       | Garvin         | 880              | 10                     | 73.8                                | + 0.4                      | 104      | 10    | 33      | 28    | 55                        | 0.52   | - 3.20                     | 0.47                  | 0.0                       | 2                                    | 27                    | 3                             | 0                          | s.         | A. M. Foss.            |
| Pawhuska           | Ossage         | 918              | 11                     |                                     |                            |          |       |         |       |                           |        |                            |                       |                           |                                      |                       |                               |                            |            | R. C. Block.           |
| Perry              | Noble          | 1,060            | 12                     | 76.1                                | + 2.9                      | 102      | 4     | 39      | 27    | 43                        | 1.19   | - 1.56                     | 0.70                  | 0.0                       | 4                                    | 21                    | 9                             | 0                          | n.         | J. A. Douglas.         |
| Ravia              | Johnson        | 796              | 8                      | 77.0                                |                            | 105      | 10    | 39      | 28    | 52                        | 0.30   |                            | 0.15                  | 0.0                       | 3                                    | 24                    | 6                             | 0                          | s.         | R. G. Guphill.         |
| Sac and Fox Agency | Canadian       | 900              | 17                     | 77.1                                | + 3.6                      | 103      | 11    | 39      | 28    | 42                        | 0.43   | - 2.15                     | 0.23                  | 0.0                       | 3                                    | 25                    | 2                             | 3                          | sw.        | D. J. Henderson.       |
| Shawnee            | Pottawatomie   | 1,041            | 9                      | 75.2                                | + 1.8                      | 102      | 11    | 36      | 28    | 47                        | 0.62   |                            | 0.43                  | 0.0                       | 3                                    | 26                    | 1                             | 3                          | s.         | Neal R. Clark.         |
| Snyder             | Kiowa          | 1,356            | 3                      | 76.2                                |                            | 101      | 10    | 40      | 38    | 43                        | 0.48   |                            | 0.48                  | 0.0                       | 1                                    | 25                    | 5                             | 0                          | s.         | Dr. W. G. Woodard.     |
| Stillwater         | Payne          | 880              | 17                     | 73.6                                | + 0.7                      | 101      | 11    | 36      | 28    | 49                        | 1.54   | - 1.80                     | 1.21                  | 0.0                       | 3                                    | 22                    | 4                             | 4                          | s.         | John M. Speidel.       |
| Supply             | Woodward       |                  | 2                      | 72.7                                |                            | 103      | 2     | 36      | 27    | 49                        | 3.32   |                            | 1.23                  | 0.0                       | 6                                    | 17                    | 11                            | 2                          | s.         | A. H. Trimbo.          |
| Temple             | Comanche       | 925              | 6                      |                                     |                            |          |       |         |       |                           |        |                            |                       |                           |                                      |                       |                               |                            |            | G. F. Fitch.           |
| Tulsa (1)          | Tulsa          | 700              | 21                     | 75.5                                | + 0.1                      | 103      | 10    | 39      | 28    | 50                        | 0.25   | - 2.10                     | 0.14                  | 0.0                       | 4                                    | 21                    | 2                             | 7                          | n.         | William Hall.          |
| Tulsa (2)          | do.            | 702              | 5                      |                                     |                            |          |       |         |       |                           |        |                            |                       |                           |                                      |                       |                               |                            |            | Miss Pearl E. Towers.  |
| Vinita             | Craig          | 698              | 6                      | 75.5                                |                            | 105      | 10    | 34      | 28    | 50                        | 1.10   |                            | 1.00                  | 0.0                       | 3                                    | 20                    | 4                             | 6                          | s.         | Lyman Bros.            |
| Wagoner            | Wagoner        | 588              | 13                     | 78.2                                | + 4.0                      | 104      | 3     | 37      | 28    | 46                        | 0.02   | - 3.46                     | 0.02                  | 0.0                       | 1                                    | 17                    | 0                             | 7                          | s.         | S. L. Hatfield.        |
| Waukomis           | Garfield       | 1,258            | 13                     | 74.3                                | + 0.4                      | 103      | 11    | 40      | 27    | 50                        | 0.89   | - 2.15                     | 0.52                  | 0.0                       | 3                                    | 24                    | 4                             | 2                          | se.        | R. C. Shades.          |
| Weatherford        | Custer         | 1,639            | 8                      | 75.4                                |                            | 102      | 10    | 39      | 28    | 46                        | 3.08   |                            | 2.19                  | 0.0                       | 4                                    | 25                    | 3                             | 2                          | s.         | M. D. Reed.            |
| Webbers Falls      | Muskogee       | 479              | 11                     | 74.6                                | - 0.2                      | 105      | 11    | 34      | 33    | 51                        | 2.00   | - 1.49                     | 0.70                  | 0.0                       | 7                                    | 13                    | 17                            | 0                          | e.         | B. D. Boulneau.        |
| Whiteagle          | Kay            | 945              | 4                      | 75.4                                |                            | 100      | 4     | 37      | 28    | 46                        | 0.26   |                            | 0.15                  | 0.0                       | 3                                    | 24                    | 6                             | 0                          | se.        | J. M. Dankwardt.       |
| Woodward           | Woodward       |                  | 1                      | 73.2                                |                            | 102      | 2     | 34      | 28    | 51                        | 4.88   |                            | 3.95                  | 0.0                       | 4                                    | 27                    | 2                             | 1                          | s.         | R. A. Boyle.           |
| Missouri.          |                |                  |                        |                                     |                            |          |       |         |       |                           |        |                            |                       |                           |                                      |                       |                               |                            |            |                        |
| Belle              | Maries         |                  | 17                     | 67.6                                | - 2.5                      | 97       | 3     | 33      | 28    | 39                        | 3.74   | - 0.08                     | 1.48                  | 0.0                       | 6                                    | 4                     | 17                            | 9                          | ne.        | A. J. Wofford.         |
| Blochtree          | Shannon        | 1,200            | 15                     | 70.2                                | + 0.8                      | 95       | 9     | 36      | 28    | 38                        | 3.68   | + 0.58                     | 1.15                  | 0.0                       | 9                                    | 21                    | 4                             | 5                          | ne.        | V. H. Kirkendall.      |
| Cape Girardeau     | Cape Girardeau | 346              | 4                      |                                     |                            |          |       |         |       |                           |        |                            |                       |                           |                                      |                       |                               |                            |            | D. L. Albert.          |
| Caruthersville     | Pemiscot       |                  | 18                     |                                     |                            |          |       |         |       |                           |        |                            |                       |                           |                                      |                       |                               |                            |            | H. E. Averill.         |
| Dean               | McDonald       |                  | 10                     | 72.5                                | + 1.6                      | 105      | 11    | 32      | 28    | 51                        | 1.66   | - 1.65                     | 1.51                  | 0.0                       | 4                                    | 24                    | 1                             | 5                          | ne.        | H. E. Dean.            |
| Doniphan           | Ripley         | 440              | 5                      | 69.2                                |                            | 95       | 9     | 36      | 28    | 38                        | 4.76   |                            | 2.00                  | 0.0                       | 6                                    | 17                    | 6                             | 7                          | ne.        | W. W. Martin.          |
| Farmington         | St. Francois   | 889              | 2                      | 67.6                                |                            | 96       | 12    | 35      | 28    | 39                        | 6.01   |                            | 3.25                  | 0.0                       | 5                                    | 17                    | 0                             | 5                          | ne.        | Miss Helen Montgomery. |
| Gano               | Dent           |                  | 5                      | 69.6                                |                            | 100      | 3     | 35      | 28    | 39                        | 3.57   |                            | 1.09                  | 0.0                       | 7                                    | 20                    | 6                             | 4                          | se.        | A. C. Leech.           |
| Goodland           | Iron           | 900              | 4                      | 66.0                                |                            | 96       | 3     | 32      | 28    | 39                        | 4.60   |                            | 1.96                  | 0.0                       | 7                                    | 20                    | 1                             | 9                          | s.         | F. M. Adams.           |
| Greenville         | Wayne          |                  | 14                     | 71.0                                | + 0.7                      | 100      | 9     | 36      | 28    | 48                        | 5.16   | + 2.31                     | 1.91                  | 0.0                       | 6                                    | 16                    | 12                            | 2                          | n.         | A. G. Templeton.       |
| Ironton            | Iron           | 925              | 31                     | 67.6                                | + 0.2                      | 97       | 3     | 31      | 28    | 41                        | 6.57   | + 3.18                     | 2.20                  | 0.0                       | 8                                    | 14                    | 12                            | 4                          | n.         | W. H. Delano.          |
| Jackson            | Cape Girardeau | 458              | 18                     | 70.5                                | + 1.3                      | 95       | 3     | 38      | 28    | 40                        | 8.36   | + 4.96                     | 2.60                  | 0.0                       | 7                                    | 15                    | 10                            | 5                          | n.         | L. M. Bean.            |
| Joplin             | Jasper         | 979              | 30                     | 68.2                                |                            | 90       | 14    | 39      | 26    | 42                        | 1.90   |                            | 1.40                  | 0.0                       | 2                                    | 13                    | 0                             | 4                          | ne.        | Miss Elizabeth Russum. |
| Koshkonong         | Oregon         | 911              | 9                      | 70.9                                |                            | 102      | 3     | 41      | 27    | 38                        | 3.24   |                            | 1.14                  | 0.0                       | 9                                    | 19                    | 8                             | 3                          | ne.        | J. W. Hitt.            |
| Lamar              | Barton         | 964              | 28                     | 73.6                                | + 3.4                      | 104      | 11    | 35      | 28    | 47                        | 1.09   | - 3.08                     | 1.00                  | 0.0                       | 2                                    | 20                    | 6                             | 4                          | sw.        | E. H. Adams.           |
| Marble Hill        | Bollinger      | 420              | 16                     | 69.2                                | - 1.4                      | 96       | 9     | 36      | 28    | 37                        | 5.75   | + 2.14                     | 2.00                  | 0.0                       | 6                                    | 16                    | 13                            | 1                          | s.         | A. F. Hendricks.       |
| Marshfield         | Webster        | 1,492            |                        |                                     |                            |          |       |         |       |                           |        |                            |                       |                           |                                      |                       |                               |                            |            | O. P. Keeler.          |
| Mt. Vernon         | Lawrence       | 1,480            | 33                     | 71.6                                | + 0.3                      | 100      | 11    | 34      | 28    | 41                        | 3.30   | - 0.22                     | 2.25                  | 0.0                       | 6                                    | 15                    | 14                            | 1                          | se.        | Dr. O. H. Brown.       |
| Neosho             | Newton         | 1,023            | 25                     | 71.6                                | + 1.4                      | 102      | 11    | 32      | 27    | 46                        | 2.16   | - 2.06                     | 1.93                  | 0.0                       | 4                                    | 21                    | 5                             | 4                          | sw.        | H. D. Dean.            |
| Oakfield           | Franklin       | 793              | 17                     | 68.4                                | - 2.2                      | 97       | 3     | 40      | 27    | 32                        | 6.82   | + 3.40                     | 3.11                  | 0.0                       | 8                                    | 12                    | 11                            | 7                          | s.         | E. E. Steiner.         |
| Olden              | Howell         | 1,246            | 19                     | 69.2                                | - 0.4                      | 97       | 10    | 38      | 28    | 40                        | 3.44   | - 0.43                     | 1.52                  | 0.0                       | 6                                    | 18                    | 8                             | 4                          | e.         | J. D. Evans.           |
| Perryville         | Perry          | 582              | 1                      |                                     |                            |          |       |         |       |                           |        |                            |                       |                           |                                      |                       |                               |                            |            | S. L. Cayton.          |
| Poplar Bluff       | Butler         | 343              |                        |                                     |                            |          |       |         |       |                           |        |                            |                       |                           |                                      |                       |                               |                            |            | E. C. Thomas.          |
| Stikston           | Scott          | 328              | 14                     | 70.7                                | - 0.5                      | 93       | 3     | 39      | 28    | 35                        | 6.57   | + 3.59                     | 2.30                  | 0.0                       | 7                                    | 23                    | 4                             | 3                          | se.        | A. A. Harrison.        |
| Springfield        | Greene         | 1,350            | 22                     | 70.6                                | + 2.7                      | 96       | 3     | 42      | 27    | 32                        | 0.69   | - 3.07                     | 0.39                  | 0.0                       | 9                                    | 22                    | 3                             | 5                          | se.        | U. S. Weather Bureau.  |
| Steelville         | Crawford       | 1,746            | 12                     | 71.4                                |                            | 99       | 3     | 31      | 28    | 42                        | 3.55   | + 0.59                     | 0.65                  | 0.0                       | 5                                    | 13                    | 8                             | 7                          | n.         | Edwin Humphrey.        |
| Willow Springs     | Howell         | 1,300            | 16                     | 70.4                                | + 1.9                      | 98       | 3     | 34      | 28    | 46                        | 2.50   | - 1.51                     | 1.19                  | 0                         |                                      |                       |                               |                            |            |                        |

TABLE 1.—Climatological data for September, 1909. District No. 7—Continued.

| Stations.        | Counties.    | Elevation, feet. | Length of record, yrs. | Temperature, in degrees Fahrenheit. |                            |          |       |         |       | Precipitation, in inches. |        |                            |                       | Sky.                      |   |                       |                               | Prevailing wind direction. | Observers. |                         |
|------------------|--------------|------------------|------------------------|-------------------------------------|----------------------------|----------|-------|---------|-------|---------------------------|--------|----------------------------|-----------------------|---------------------------|---|-----------------------|-------------------------------|----------------------------|------------|-------------------------|
|                  |              |                  |                        | Mean.                               | Departure from the normal. | Highest. | Date. | Lowest. | Date. | Greatest daily range.     | Total. | Departure from the normal. | Greatest in 24 hours. | Total snowfall unmelting. | Number of rainy days, .01 inch or more. | Number of clear days. | Number of partly cloudy days. |                            |            | Number of cloudy days.  |
| Arkansas—Cont'd. |              |                  |                        |                                     |                            |          |       |         |       |                           |        |                            |                       |                           |   |                       |                               |                            |            |                         |
| Calico Rock.     | Izard        | 361              | 5                      | 76.2                                | + 1.8                      | 104      | 10    | 39      | 28    | 45                        | 3.14   |                            | 1.30                  | 0.0                       | 4                                       | 27                    | 0                             | 3                          | ne.        | W. H. Stoner.           |
| Camden.          | Ouachita     | 158              | 24                     | 77.8                                |                            | 104      | 10†   | 39      | 28    | 47                        | 4.50   | - 0.05                     | 2.20                  | 0.0                       | 6                                       | 20                    | 6                             | 4                          | ne.        | R. H. Quarterman.       |
| Centerpoint.     | Howard       |                  | 9                      |                                     |                            |          |       |         |       |                           | 3.30   |                            |                       | 0.0                       | 1                                       |                       |                               |                            |            | J. M. Huddleston.       |
| Clarendon.       | Monroe       | 171              | 5                      |                                     |                            |          |       |         |       |                           | 4.34   |                            | 1.78                  | 0.0                       | 8                                       |                       |                               |                            |            | Mrs. B. E. Bishop.      |
| Conway.          | Faulkner     | 309              | 26                     | 75.4                                | + 2.1                      | 104      | 10    | 39      | 28    | 43                        | 2.59   | - 0.97                     | 1.64                  | 0.0                       | 6                                       | 14                    | 15                            | 1                          | se.        | G. H. Burr.             |
| Corning.         | Clay         | 293              | 17                     | 72.2                                | + 1.3                      | 99       | 3     | 36      | 28    | 36                        | 3.36   | - 0.33                     | 1.92                  | 0.0                       | 8                                       | 14                    | 9                             | 7                          | n.         | Jacob Brobst.           |
| Dardanelle.      | Yell         | 330              | 23                     | 75.8                                |                            | 104      | 3†    | 38      | 28    | 57                        | 1.46   | - 1.61                     | 0.72                  | 0.0                       | 4                                       | 19                    | 6                             | 5                          | 0          | A. Bernard.             |
| Dodd City.       | Marion       | 1,175            | 28                     | 71.8                                | + 0.2                      | 102      | 3     | 34      | 28    | 45                        | 1.81   | - 1.95                     | 1.25                  | 0.0                       | 4                                       | 13                    | 9                             | 8                          | s.         | Neal Dodd.              |
| Dutton.          | Madison      |                  | 8                      |                                     |                            |          |       |         |       |                           | 0.45   |                            | 0.37                  | 0.0                       | 2                                       |                       |                               |                            |            | T. S. Williamson.       |
| Earl.            | Crittenden   |                  | 3                      | 73.5                                |                            | 99       | 3     | 38      | 27    | 40                        | 6.72   |                            | 2.32                  | 0.0                       | 5                                       | 20                    | 6                             | 4                          |            | W. J. Moss.             |
| Eldorado.        | Union        | 265              | 5                      | 76.0                                |                            | 103      | 10    | 41      | 28    | 39                        | 4.21   |                            | 3.05                  | 0.0                       | 4                                       | 24                    | 3                             | 3                          | n.         | Fred A. Babb.           |
| England.         | Lonoke       |                  | 3                      | 74.7                                |                            | 101      | 9     | 39      | 28†   | 47                        | 3.50   |                            | 1.95                  | 0.0                       | 6                                       | 10                    | 14                            | 6                          | n.         | J. C. Chenault.         |
| Eureka Springs.  | Carroll      |                  | 8                      |                                     |                            |          |       |         |       |                           |        |                            |                       |                           |   |                       |                               |                            |            | Jas. T. Pomeroy.        |
| Fayetteville.    | Washington   | 1,451            | 30                     | 75.7                                | + 4.5                      | 102      | 11    | 35      | 28    | 45                        | 0.59   | - 2.99                     | 0.35                  | 0.0                       | 4                                       | 19                    | 8                             | 3                          | sw.        | University of Arkansas. |
| Fort Smith.      | Sebastian    | 481              | 27                     | 76.4                                | + 3.7                      | 104      | 11    | 42      | 28    | 42                        | 0.38   | - 2.79                     | 0.31                  | 0.0                       | 5                                       | 18                    | 5                             | 7                          | e.         | U. S. Weather Bureau.   |
| Fulton.          | Hempstead    | 264              | 5                      |                                     |                            |          |       |         |       |                           | 1.04   |                            | 0.74                  | 0.0                       | 2                                       |                       |                               |                            |            | B. C. Logan.            |
| Hardy.           | Sharp        | 643              | 11                     | 71.9                                | - 0.3                      | 105      | 3     | 40      | 28    | 38                        | 4.51   | + 0.70                     | 1.06                  | 0.0                       | 8                                       | 11                    | 13                            | 6                          | se.        | C. A. Caywood.          |
| Helena (1).      | Phillipi     | 182              | 24                     | 74.8                                | + 0.6                      | 99       | 10    | 43      | 28    | 36                        | 3.28   | - 0.36                     | 2.86                  | 0.0                       | 5                                       | 21                    | 2                             | 7                          | n.         | Robert Kyle.            |
| Helena (2).      | do           | 182              | 8                      |                                     |                            |          |       |         |       |                           |        |                            |                       |                           |   |                       |                               |                            |            | B. F. Modisett.         |
| Hot Springs.     | Garland      | 600              | 3                      |                                     |                            | 101      | 3†    |         |       |                           | 4.23   | + 0.64                     | 1.43                  | 0.0                       | 4                                       | 20                    | 9                             | 1                          | sw.        | Hot Springs Water Co.   |
| Huttig.          | Union        | 85               | 2                      | 76.4                                |                            | 101      | 8†    | 41      | 29    | 40                        | 3.65   |                            | 2.35                  | 0.0                       | 5                                       | 18                    | 12                            | 0                          |            | C. A. Berry.            |
| Jonesboro.       | Craighead    | 945              | 14                     | 72.9                                | - 1.3                      | 103      | 3     | 39      | 28    | 40                        | 5.79   | + 2.03                     | 3.04                  | 0.0                       | 4                                       | 14                    | 15                            | 1                          | s.         | Benedictine Sisters.    |
| Junction.        | Union        |                  | 16                     |                                     |                            |          |       |         |       |                           |        |                            |                       |                           |   |                       |                               |                            |            | J. A. Lowderback.       |
| Lacrosse.        | Izard        |                  | 15                     |                                     |                            |          |       |         |       |                           |        |                            |                       |                           |   |                       |                               |                            |            | R. E. Kennard.          |
| Lake Farm.       | Jefferson    | 195              | 2                      | 74.2                                |                            | 102      | 1†    | 38      | 28†   | 42                        | 3.67   |                            | 2.02                  | 0.0                       | 4                                       | 19                    | 7                             | 4                          | s.         | R. H. Gillespie.        |
| Lewisville.      | Lafayette    | 262              | 6                      | 78.0                                |                            | 106      | 10    | 39      | 28    | 45                        | 1.51   |                            | 0.54                  | 0.0                       | 5                                       | 23                    | 1                             | 6                          |            | F. W. Youmans.          |
| Little Rock.     | Pulaski      | 357              | 30                     | 74.8                                | + 1.7                      | 98       | 3     | 46      | 28    | 31                        | 3.17   | - 0.09                     | 1.99                  | 0.0                       | 6                                       | 14                    | 12                            | 4                          | ne.        | U. S. Weather Bureau.   |
| Lutherville.     | Johnson      | 775              | 12                     | 74.8                                | + 1.6                      | 105      | 10    | 35      | 28    | 44                        | 0.67   |                            | 0.59                  | 0.0                       | 2                                       | 19                    | 9                             | 2                          | sw.        | Herman Hentschel.       |
| McNell.          | Columbia     | 321              | 22                     |                                     |                            |          |       |         |       |                           |        |                            |                       |                           |   |                       |                               |                            |            | L. A. Smith.            |
| Malvern.         | Hot Spring   | 277              | 22                     | 74.6                                | + 0.5                      | 104      | 10    | 39      | 28†   | 44                        | 2.53   | - 0.07                     | 1.19                  | 0.0                       | 6                                       | 14                    | 3                             | 13                         | ne.        | Miss L. C. Smith.       |
| Mammoth Spring.  | Fulton       |                  | 5                      | 70.2                                |                            | 103      | 3     | 34      | 28    | 46                        | 4.54   |                            | 1.35                  | 0.0                       | 8                                       |                       |                               |                            |            | F. Wallick.             |
| Marked Tree.     | Poinsett     |                  | 5                      |                                     |                            |          |       |         |       |                           | 3.89   |                            | 2.59                  | 0.0                       | 4                                       |                       |                               |                            |            | L. Smith.               |
| Mena.            | Polk         | 1,100            | 23                     | 75.2                                | + 2.1                      | 97       | 8     | 38      | 28    | 38                        | 0.86   | - 2.96                     | 0.37                  | 0.0                       | 4                                       | 21                    | 7                             | 2                          | sw.        | D. H. Hopkins.          |
| Mossville.       | Newton       |                  | 16                     | 71.9                                | + 1.9                      | 98       | 11    | 42      | 27    | 34                        | 1.76   | - 2.64                     | 0.80                  | 0.0                       | 3                                       | 18                    | 8                             | 4                          | s.         | Theo. Ober.             |
| Mount Nebo.      | Yell         | 1,750            | 19                     |                                     |                            |          |       |         |       |                           |        |                            |                       |                           |   |                       |                               |                            |            | T. G. Church.           |
| Newport (1).     | Jackson      | 231              | 25                     | 72.9                                | - 0.4                      | 99       | 3     | 41      | 28    | 38                        | 8.05   | + 4.39                     | 4.27                  | 0.0                       | 7                                       | 22                    | 0                             | 8                          | s.         | Mrs. A. B. Hillhouse.   |
| Newport (2).     | do           | 231              |                        |                                     |                            |          |       |         |       |                           |        |                            |                       |                           |   |                       |                               |                            |            | A. V. Hughes.           |
| Oark.            | Franklin     | 377              | 18                     | 78.8                                | + 2.5                      | 108      | 3     | 43      | 28    | 44                        | 0.50   | - 2.52                     | 0.28                  | 0.0                       | 2                                       | 25                    | 4                             | 1                          | e.         | R. M. Adams.            |
| Pine Bluff.      | Jefferson    | 215              | 21                     | 75.7                                | 0.0                        | 104      | 9     | 40      | 29    | 42                        | 3.50   | - 0.24                     | 2.50                  | 0.0                       | 5                                       | 21                    | 3                             | 6                          | w.         | J. H. Hudson.           |
| Pocahontas.      | Randolph     |                  | 17                     | 73.0                                | + 1.2                      | 104      | 3     | 40      | 28    | 34                        | 4.26   | + 0.96                     | 1.90                  | 0.0                       | 6                                       | 8                     | 19                            | 3                          |            | Benedictine Sisters.    |
| Pond.            | Benton       | 1,250            | 12                     | 72.7                                | + 2.6                      | 103      | 11    | 33      | 27†   | 49                        | 1.22   | - 2.59                     | 0.95                  | 0.0                       | 4                                       | 15                    | 12                            | 3                          | sw.        | A. F. Stevens.          |
| Portland.        | Ashley       | 123              |                        | 77.4                                | + 1.8                      | 105      | 8†    | 42      | 29    | 50                        | 3.20   |                            | 2.10                  | 0.0                       | 6                                       | 21                    | 4                             | 5                          | n.         | T. A. Corson.           |
| Prescott.        | Nevada       | 327              | 21                     | 77.2                                | + 1.6                      | 106      | 10    | 40      | 29    | 46                        | 1.54   | - 1.09                     | 1.05                  | 0.0                       | 4                                       | 24                    | 2                             | 4                          | ne.        | A. M. Ellsworth.        |
| Princeton.       | Dallas       | 287              | 8                      |                                     |                            |          |       |         |       |                           |        |                            |                       |                           |   |                       |                               |                            |            | Capt. D. R. Feaster.    |
| Rogers.          | Benton       | 1,385            | 18                     | 73.6                                | + 3.2                      | 102      | 11    | 34      | 28    | 43                        | 0.39   | - 3.11                     | 0.36                  | 0.0                       | 3                                       | 17                    | 8                             | 5                          | n.         | Carl A. Stark.          |
| Russellville.    | Pope         | 348              | 24                     |                                     |                            |          |       |         |       |                           |        |                            |                       |                           |   |                       |                               |                            |            | J. F. Hodgins.          |
| Spicerville.     | Logan        | 1,050            | 12                     | 77.1                                | + 2.3                      | 104      | 3†    | 40      | 28    | 46                        | 1.67   | - 1.50                     | 1.39                  | 0.0                       | 3                                       | 22                    | 3                             | 5                          | se.        | New Subiaco Abbey.      |
| Springbank.      | Miller       | 182              | 3                      |                                     |                            |          |       |         |       |                           | 1.75   |                            | 0.88                  | 0.0                       | 4                                       |                       |                               |                            |            | G. Field.               |
| Stuttgart.       | Arkansas     | 495              | 23                     | 74.8                                | + 1.7                      | 105      | 10    | 39      | 28    | 40                        | 5.12   | + 1.83                     | 2.37                  | 0.0                       | 6                                       | 19                    | 8                             | 3                          | n.         | H. A. Buerkle.          |
| Texasana.        | Miller       | 332              | 25                     | 77.8                                | + 1.4                      | 108      | 10    | 42      | 28    | 42                        | 0.81   | - 2.10                     | 0.42                  | 0.0                       | 4                                       | 26                    | 2                             | 2                          | s.         | W. B. Weeks.            |
| Warren.          | Bradley      | 304              | 14                     | 75.2                                | - 0.4                      | 104      | 10    | 41      | 29    | 40                        | 2.90   | - 0.54                     | 2.43                  | 0.0                       | 3                                       | 15                    | 7                             | 8                          | n.         | W. J. Savage.           |
| Whitecliffs.     | Little River | 206              | 5                      |                                     |                            |          |       |         |       |                           | 0.48   |                            | 0.40                  | 0.0                       | 3                                       |                       |                               |                            |            | John E. Payton.         |
| Wiggs.           | Garland      |                  | 16                     | 75.2                                | + 1.3                      | 103      | 10    | 33      | 28    | 51                        | 2.82   | - 0.87                     | 0.94                  | 0.0                       | 5                                       | 10                    | 17                            | 3                          | sw.        | S. D. Jester.           |
| Wynne.           | Cross        |                  | 1                      | 72.9                                |                            | 103      | 3     | 38      | 28    | 39                        | 4.71   |                            | 1.54                  | 0.0                       | 7                                       | 18                    | 1                             | 11                         | n.         | R. R. Poole.            |
| Mississippi.     |              |                  |                        |                                     |                            |          |       |         |       |                           |        |                            |                       |                           |   |                       |                               |                            |            |                         |
| Angulla.         | Sharkey      |                  | 1                      | 75.8                                |                            | 101      | 10    | 41      | 29    | 35                        | 4.62   |                            | 3.75                  | 0.0                       | 2                                       | 19                    | 8                             | 3                          | ne.        | E. W. Cook.             |
| Austin.          | Tunica       | 200              | 13                     | 73.4                                | - 0.3                      | 98       | 10    | 41      | 28†   | 38                        | 3.97   | + 0.50                     | 2.87                  | 0.0                       | 3                                       | 22                    | 6                             | 2                          | n.         | H. J. Irvine.           |
| Batesville.      | Panola       | 230              | 22                     | 74.9                                | + 1.7                      | 102      | 10    | 39      | 29    | 46                        | 3.16   | + 0.07                     | 2.10                  | 0.0                       | 6                                       | 25                    | 0                             | 5                          | e.         | J. M. Cox.              |
| Byhalia.         | Marshall     | 390              |                        |                                     |                            |          |       |         |       |                           | 4.92   |                            | 1.87                  | 0.0                       | 5                                       | 9                     | 18                            | 3                          | nw.        | Tallahatchie Dng. Com.  |
| Canton.          | Madison      | 223              | 19                     | 76.5                                | + 0.8                      | 99       | 8     | 43      | 28†   | 38                        | 2.44   | - 0.53                     | 2.23                  | 0.0                       | 4                                       | 16                    | 12                            | 2                          | se.        | Dr. G. W. Smith-Vaniz.  |
| Clarkdale.       | Coahoma      | 177              | 2                      | 74.7                                |                            | 101      | 9†    | 40      | 29    | 45                        | 2.51   |                            | 2.00                  | 0.0                       | 3                                       | 20                    | 5                             | 5                          | se.        | J. F. Durham.           |
| Coffeetown.      | Yalobusha    |                  |                        |                                     |                            |          |       |         |       |                           | 2.43   |                            | 2.05                  | 0.0                       | 5                                       | 18                    | 11                            | 1                          | n.         | Tallahatchie Dng. Com.  |
| Corinth.         | Alcorn       | 430              | 21                     | 72.4                                | 0.0                        | 96       | 3     | 41      | 29    | 33                        | 7.95   | + 5.14                     | 5.25                  | 0.0                       | 7                                       | 20                    | 2                             | 8                          | se.        | Milton A. Chandler.     |
| Crenshaw.        | Panola       | 187              |                        |                                     |                            |          |       |         |       |                           | 2.83   |                            | 1.86                  | 0.0                       | 3                                       | 16                    | 8                             | 6                          | ne.        | Tallahatchie Dng. Com.  |
| Denmark.         | Lafayette    |                  |                        |                                     |                            |          |       |         |       |                           | 6.38   |                            | 3.03                  | 0.0                       | 9                                       |                       |                               |                            |            | Do.                     |
| Duck Hill.       | Montgomery   |                  | 10                     |                                     |                            |          |       | 39      | 28    | 41                        |        |                            |                       | 0.0                       |   |                       |                               |                            |            | W. H. Eskridge.         |
| Edwards.         | Hinds        | 232              | 22                     | 70.2                                | - 0.7                      | 98       | 1†    | 42      | 28†   | 39                        | 5.21   | + 1.99                     | 3.95                  | 0.0                       | 8                                       | 17                    | 12                            | 1                          | n.         | C. R. Knox.             |
| Enid.            | Tallahatchie |                  |                        |                                     |                            |          |       |         |       |                           | 2.81   |                            | 2.30                  | 0.0                       | 5                                       | 24                    | 5                             | 1                          | c.         | Tallahatchie Dng. Com.  |
| Fayette.         | Jefferson    | 282              | 8                      | 76.1                                |                            | 99       | 10    | 39      | 28    | 39                        | 8.41   |                            | 5.06                  | 0.0                       | 3                                       | 22                    | 7                             | 1                          | sw.        | T. L. Darden.           |
| Greenville.      | Washington   | 126              | 22                     | 76.6                                | + 0.9                      | 102      | 10    | 45      | 29    | 39                        | 4.35   | + 1.30                     | 3.56                  | 0.0                       | 5                                       | 25                    | 0                             | 5                          | se.        | F. L. Harblson.         |



TABLE 1.—Climatological data for September, 1909. District No. 7—Continued.

| Stations.                | Counties.             | Elevation, feet. | Length of record, yrs. | Temperature, in degrees Fahrenheit. |                            |          |       |         |       | Precipitation, in inches. |        |                            |                       | Sky.                     |   |                       |                               | Observers. |                        |                                       |
|--------------------------|-----------------------|------------------|------------------------|-------------------------------------|----------------------------|----------|-------|---------|-------|---------------------------|--------|----------------------------|-----------------------|--------------------------|---|-----------------------|-------------------------------|------------|------------------------|---------------------------------------|
|                          |                       |                  |                        | Mean.                               | Departure from the normal. | Highest. | Date. | Lowest. | Date. | Greatest daily range.     | Total. | Departure from the normal. | Greatest in 24 hours. | Total snowfall unmelted. | Number of rainy days, .01 inch or more. | Number of clear days. | Number of partly cloudy days. |            | Number of cloudy days. | Prevailing wind direction.            |
| Louisiana.               |                       |                  |                        |                                     |                            |          |       |         |       |                           |        |                            |                       |                          |   |                       |                               |            |                        |                                       |
| Abbeville.....           | Vermilion.....        | 18               | 22                     | 75.6*                               | - 2.9                      | 97       | 5     | 44      | 28†   | 40                        | 8.53   | + 4.35                     | 5.92                  | 0.0                      | 8                                       | 21                    | 7                             | 2          | n.                     | Hon. C. J. Edwards.                   |
| Alexandria.....          | Rapides.....          | 77               | 21                     | 77.1                                | - 0.2                      | 99       | 10†   | 41      | 29    | 44                        | 3.35   | + 0.50                     | 2.30                  | 0.0                      | 5                                       | 19                    | 6                             | 5          | n.                     | Miss Nellie Graham.                   |
| Amite.....               | Tangipahoa.....       | 130              | 21                     | 77.2                                | - 0.1                      | 97       | 12    | 46      | 28†   | 36                        | 4.35   | - 0.20                     | 2.13                  | 0.0                      | 8                                       | 7                     | 23                            | 0          | n.                     | Miss Lula M. Wentz.                   |
| Baton Rouge.....         | E. Baton Rouge.....   | 35               | 20                     | 77.0                                | - 0.9                      | 99       | 6†    | 43      | 28    | 30                        | 6.18   | + 2.54                     | 5.15                  | 0.0                      | 5                                       | 26                    | 1                             | 3          | ne.                    | Elmo M. Bott.                         |
| Burnside.....            | Ascension.....        | 20               | 9                      | 77.6*                               |                            | 93       | 1†    | 46*     | 28    | 38*                       | 6.33   |                            | 5.60                  | 0.0                      | 4                                       | 16                    | 10                            | 4          | e.                     | C. S. McFarland.                      |
| Burrwood.....            | Plaquemines.....      | 1                | 19                     | 80.6*                               | + 0.4                      | 90*      | 7     | 64*     | 28    | 12*                       | 4.87   | - 1.81                     | 2.50                  | 0.0                      | 7                                       | ...                   | ...                           | ...        | n.                     | Graham Myers.                         |
| Calhoun.....             | Ouachita.....         | 180              | 17                     | 76.6                                | + 1.5                      | 104      | 10    | 40      | 29    | 42                        | 3.13   | - 0.35                     | 2.10                  | 0.0                      | 4                                       | 15                    | 14                            | 1          | s.                     | N. L. Exp. Station.                   |
| Cameron.....             | Cameron.....          | 6                | 14                     |                                     |                            |          |       |         |       |                           |        |                            |                       |                          |   |                       |                               |            |                        | State Biologic Station.               |
| Cheneyville.....         | Rapides.....          | 67               | 22                     | 77.0                                | - 0.0                      | 98       | 8†    | 40      | 28†   | 45                        | 3.76   | + 0.69                     | 3.20                  | 0.0                      | 3                                       | 23                    | 2                             | 5          | n.                     | Walter I. Tanner.                     |
| Clinton.....             | East Feliciana.....   | 113              | 20                     | 76.0                                | - 0.7                      | 96       | 10    | 46      | 29    | 33                        | 8.27   | + 4.51                     | 5.90                  | 0.0                      | 6                                       | 18                    | 7                             | 5          | n.                     | John A. White, jr.                    |
| Collinston.....          | Morehouse.....        | 65               | 7                      | 76.8*                               |                            | 102*     | 10    | 41*     | 28    | 51*                       | 2.50   |                            | 2.00                  | 0.0                      | 4                                       | 18                    | 7                             | 5          | ...                    | W. A. Page.                           |
| Covington.....           | St. Tammany.....      | 39               | 17                     | 78.0                                | + 0.3                      | 96       | 6†    | 47      | 29†   | 39                        | 5.94   | + 1.55                     | 3.35                  | 0.0                      | 9                                       | 14                    | 10                            | 6          | se.                    | C. Champagne.                         |
| Dodson.....              | Winn.....             | 33               | 1                      | 77.6                                |                            | 101      | 8†    | 43      | 29    | 38                        | 2.92   |                            | 1.62                  | 0.0                      | 3                                       | 20                    | 9                             | 1          | n.                     | J. P. Lucas.                          |
| Donaldsonville.....      | Ascension.....        | 33               | 19                     | 78.7                                | - 0.1                      | 96       | 1†    | 48      | 28    | 36                        | 5.00   | + 0.68                     | 4.60                  | 0.0                      | 3                                       | 28                    | 0                             | 2          | n.                     | John F. Park.                         |
| Farmerville.....         | Union.....            | 177              | 19                     | 76.4*                               | + 0.6                      | 100*     | 8†    | 43*     | 29    | 39*                       | 4.41   | + 1.83                     | 3.05                  | 0.0                      | 2                                       | 18                    | 6                             | 1          | n.                     | W. P. Chandler.                       |
| Ferriday.....            | Concordia.....        | 3                | 3                      | 75.2                                |                            | 100      | 10    | 40      | 29    | 40                        | 4.33   |                            | 3.35                  | 0.0                      | 2                                       | 25                    | 0                             | 5          | n.                     | R. Z. Slater.                         |
| Franklin.....            | St. Mary.....         | 10               | 17                     | 79.4                                | + 0.5                      | 98       | 2†    | 48      | 29    | 35                        | 7.46   | + 4.39                     | 5.40                  | 0.0                      | 9                                       | 33                    | 3                             | 4          | n.                     | Miss Josephine M. Bonney              |
| Grand Cane.....          | De Soto.....          | 302              | 3                      | 77.2                                |                            | 103      | 10    | 40      | 29†   | 49                        | 2.67   |                            | 1.09                  | 0.0                      | 3                                       | 19                    | 0                             | 11         | s.                     | J. J. Paxton.                         |
| Grand Coteau.....        | St. Landry.....       | 93               | 17                     | 77.8                                | + 0.4                      | 97       | 1     | 45      | 28    | 36                        | 5.14   | + 1.70                     | 3.80                  | 0.0                      | 6                                       | 20                    | 9                             | 1          | n.                     | St. Charles College.                  |
| Hammond.....             | Tangipahoa.....       | 44               | 10                     | 77.6                                | + 0.5                      | 97       | 6     | 45      | 29    | 38                        | 7.59   | + 4.73                     | 3.20                  | 0.0                      | 6                                       | 24                    | 5                             | 1          | se.                    | C. C. Carr.                           |
| Houma.....               | Terrebonne.....       | 30               | 17                     |                                     |                            |          |       |         |       |                           |        |                            |                       |                          |   |                       |                               |            |                        | J. M. Haggerty.                       |
| Jennings.....            | Calcasieu.....        | 30               | 11                     | 78.0                                | + 0.1                      | 97       | 6     | 43      | 28†   | 42                        | 2.94   | - 2.00                     | 1.65                  | 0.0                      | 6                                       | 12                    | 17                            | 1          | n.                     | J. F. Buch.                           |
| Lafayette.....           | Lafayette.....        | 36               | 22                     | 77.0                                | - 0.7                      | 95       | 1†    | 44      | 28    | 37                        | 5.43   | + 1.93                     | 5.09                  | 0.0                      | 7                                       | 23                    | 3                             | 4          | n.                     | J. J. Davidson.                       |
| Lake Charles.....        | Calcasieu.....        | 22               | 21                     | 77.2                                | - 0.4                      | 100      | 1†    | 45      | 28†   | 41                        | 4.23   | + 0.54                     | 2.57                  | 0.0                      | 4                                       | 27                    | 1                             | 2          | n.                     | A. O. Boudreaux.                      |
| Lakeside.....            | Cameron.....          | 8                | 8                      | 79.0                                |                            | 98       | 8     | 43      | 28    | 31                        | 2.97   |                            | 1.55                  | 0.0                      | 5                                       | ...                   | ...                           | ...        | ne.                    | L. J. Nunemacher.                     |
| Lawrence.....            | Plaquemines.....      | 6                | 19                     | 78.2*                               | - 1.2                      | 96*      | 4†    | 53*     | 28    | 29*                       | 5.22   | - 1.28                     | 2.20                  | 0.0                      | 7                                       | 21                    | 1                             | 8          | n.                     | H. C. Warmoth.                        |
| Liberty Hill.....        | Blenville.....        | 23               | 23                     | 81.4                                | + 4.6                      | 105      | 10    | 45      | 28    | 35                        | 3.70   | + 0.65                     | 3.27                  | 0.0                      | 4                                       | 19                    | 10                            | 1          | n.                     | Dr. E. A. Crawford.                   |
| Logansport.....          | De Soto.....          | 192              | 4                      |                                     |                            |          |       |         |       |                           |        |                            |                       |                          |   |                       |                               |            |                        | Mrs. Bettie M. Dennis.                |
| Melville.....            | St. Landry.....       | 45               | 23                     | 77.2                                | - 0.5                      | 98       | 1†    | 44      | 28†   | 40                        | 7.54   | + 4.44                     | 6.90                  | 0.0                      | 3                                       | 26                    | 0                             | 4          | n.                     | Chas. B. McNeill.                     |
| Minden.....              | Webster.....          | 194              | 21                     | 76.4                                | - 0.6                      | 104      | 9†    | 38      | 29    | 49                        | 2.10   | - 0.23                     | 1.22                  | 0.0                      | 6                                       | 17                    | 9                             | 4          | n.                     | Miss Ethel Fort.                      |
| Monroe.....              | Ouachita.....         | 82               | 22                     | 75.6                                | - 1.3                      | 98       | 1†    | 45      | 28    | 38                        | 2.54   | - 0.36                     | 1.98                  | 0.0                      | 4                                       | 27                    | 0                             | 3          | s.                     | Eugene Stannard.                      |
| Morgan City.....         | St. Mary.....         | 14               | 4                      |                                     |                            |          |       |         |       |                           | 4.42   |                            | 2.08                  | 0.0                      | 8                                       | 25                    | 1                             | 4          | n.                     | Virgil E. Kinsey.                     |
| Newellton.....           | Tensas.....           | 15               | 2                      | 74.7                                |                            | 94       | 2†    | 41      | 28    | 35                        | 3.00   |                            | 2.75                  | 0.0                      | 3                                       | 11                    | 10                            | 2          | n.                     | John D. Fultz.                        |
| New Iberia.....          | Iberia.....           | 15               | 19                     | 77.8                                | + 0.2                      | 93       | 3†    | 46      | 28    | 27                        | 10.60  | + 6.54                     | 6.50                  | 0.0                      | 10                                      | 18                    | 15                            | 4          | ne.                    | Mrs. Jno. A. Gebert.                  |
| New Orleans (1).....     | Orleans.....          | 15               | 35                     | 79.4                                | + 1.4                      | 93       | 4     | 56      | 28    | 17                        | 7.68   | + 2.87                     | 4.45                  | 0.0                      | 9                                       | 14                    | 14                            | 2          | n.                     | U. S. Weather Bureau.                 |
| New Orleans (2).....     | do.....               | 18               | 23                     |                                     |                            | 92       | 2†    |         |       |                           | 6.54   | + 0.52                     | 4.65                  | 0.0                      | 8                                       | 16                    | 5                             | 9          | s.                     | Sugar Exp. Station.                   |
| New Orleans (3).....     | do.....               |                  |                        |                                     |                            |          |       |         |       |                           | 8.39   |                            | 4.33                  | 0.0                      | 8                                       | ...                   | ...                           | ...        |                        | Sewerage and Water Board, New Orleans |
| New Orleans (4).....     | do.....               |                  |                        |                                     |                            |          |       |         |       |                           | 6.41   |                            | 4.60                  | 0.0                      | 11                                      | ...                   | ...                           | ...        |                        | Drainage Commission.                  |
| New Orleans (5).....     | do.....               |                  |                        |                                     |                            |          |       |         |       |                           | 7.08   |                            | 4.34                  | 0.0                      | 10                                      | ...                   | ...                           | ...        |                        |                                       |
| New Orleans (6).....     | do.....               |                  |                        |                                     |                            |          |       |         |       |                           | 7.08   |                            | 4.38                  | 0.0                      | 10                                      | ...                   | ...                           | ...        |                        |                                       |
| New Orleans (7).....     | do.....               |                  |                        |                                     |                            |          |       |         |       |                           | 5.59   |                            | 4.38                  | 0.0                      | 7                                       | ...                   | ...                           | ...        |                        |                                       |
| New Orleans (8).....     | do.....               |                  |                        |                                     |                            |          |       |         |       |                           | 4.61   |                            | 3.54                  | 0.0                      | 10                                      | ...                   | ...                           | ...        |                        |                                       |
| Opelousas.....           | St. Landry.....       | 83               | 18                     | 78.1                                | + 0.3                      | 100      | 7†    | 42      | 28    | 39                        | 6.15   | + 2.52                     | 5.54                  | 0.0                      | 4                                       | 20                    | 2                             | 8          | n.                     | Andrew Moresl.                        |
| Pearl River.....         | St. Tammany.....      | 3                |                        |                                     |                            |          |       |         |       |                           | 7.38   |                            | 4.40                  | 0.0                      | 12                                      | 23                    | 5                             | 2          | e.                     | George F. Bancks.                     |
| Plain Dealing.....       | Boeiser.....          | 263              | 17                     | 77.8                                | + 1.4                      | 104      | 10    | 39      | 28†   | 46                        | 1.62   | - 1.37                     | 0.49                  | 0.0                      | 5                                       | 13                    | 14                            | 3          | ne.                    | Leon Sanders.                         |
| Rayne.....               | Acadia.....           | 44               | 18                     | 78.2                                | - 0.0                      | 99       | 10    | 47      | 30    | 38                        | 3.75   | - 0.47                     | 2.90                  | 0.0                      | 3                                       | 25                    | 2                             | 3          | n.                     | A. P. McNeill.                        |
| Reserve.....             | St. John Baptist..... | 8                |                        |                                     |                            | 96       | 6     |         |       |                           | 5.74   |                            | 3.93                  | 0.0                      | 4                                       | 7                     | 19                            | 4          | ...                    | Leon Godchaux Co.                     |
| Robelline.....           | Natchitoches.....     | 147              | 14                     | 76.4                                | - 0.9                      | 103      | 9     | 36      | 28    | 48                        | 2.03   | - 0.94                     | 1.99                  | 0.0                      | 2                                       | 25                    | 1                             | 4          | s.                     | Miss Ruby McCook.                     |
| Ruston.....              | Lincoln.....          | 312              | 13                     | 77.6                                | - 0.8                      | 104      | 10    | 42      | 27    | 40                        | 2.00   | - 1.26                     | 2.00                  | 0.0                      | 2                                       | 24                    | 5                             | 1          | n.                     | J. C. H. McKinney.                    |
| Schriever.....           | Terrebonne.....       | 17               | 18                     | 79.7                                | + 1.5                      | 100      | 6     | 47      | 28†   | 38                        | 9.74   | + 5.00                     | 6.93                  | 0.0                      | 9                                       | 26                    | 1                             | 3          | e.                     | Charles V. Moore.                     |
| Shreveport.....          | Caddo.....            | 249              | 37                     | 77.1                                | + 1.4                      | 99       | 10    | 44      | 28    | 32                        | 1.46   | - 1.76                     | 0.76                  | 0.0                      | 6                                       | 19                    | 8                             | 3          | ne.                    | U. S. Weather Bureau.                 |
| Simmesport.....          | Avoyelles.....        | 4                |                        |                                     |                            |          |       |         |       |                           | 4.25   |                            | 3.68                  | 0.0                      | 6                                       | 13                    | 11                            | 6          | ne.                    | W. P. Denny.                          |
| Southern Univ. Farm..... | Jefferson.....        | 14               | 5                      |                                     |                            |          |       |         |       |                           | 5.90   | + 1.18                     | 4.00                  | 0.0                      | 6                                       | 13                    | 13                            | 4          | ne.                    | F. L. St. Martin.                     |
| St. Francisville.....    | West Feliciana.....   | 115              | 5                      |                                     |                            | 97       | 1     | 50      | 30    | 32                        | 14.07  |                            | 13.50                 | 0.0                      | 2                                       | ...                   | ...                           | ...        | ne.                    | L. P. Kilbourne.                      |
| Sugartown.....           | Calcasieu.....        | 17               | 17                     | 77.6                                | + 0.4                      | 94       | 2     | 49      | 29    | 29                        | 0.61   | - 2.51                     | 0.61                  | 0.0                      | 1                                       | 12                    | 16                            | 2          | ...                    | G. W. Richardson.                     |
| Tallulah.....            | Madison.....          | 91               | 1                      | 76.5                                |                            | 102      | 10    | 38      | 29    | 45                        | 3.75   |                            | 3.40                  | 0.0                      | 3                                       | 13                    | 16                            | 1          | ...                    | G. P. Blair.                          |

\* Precipitation included in that of the next measurement.

\* \* Temperature extremes are from observed readings of the dry-bulb; means are computed from observed readings

† Also on other dates.

‡ Data are from standard instruments not supplied by the U. S. Weather Bureau.

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

|| Estimated by observer.

¶ Precipitation for the 24 hours ending on the morning when it is measured.

T. Precipitation is less than 0.01 inch rain or melted snow.

\*, †, ‡, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.

[illegible]

TABLE 2.—Daily precipitation for September, 1909. District No. 7—Continued.

| Stations            | River basins. | Day of month. |     |    |      |      |      |      |     |     |     |     |      |      |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | Total |      |
|---------------------|---------------|---------------|-----|----|------|------|------|------|-----|-----|-----|-----|------|------|-----|------|----|----|----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|-------|------|
|                     |               | 1             | 2   | 3  | 4    | 5    | 6    | 7    | 8   | 9   | 10  | 11  | 12   | 13   | 14  | 15   | 16 | 17 | 18 | 19  | 20  | 21  | 22  | 23  | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |       |      |
| Texas—Cont'd.       |               |               |     |    |      |      |      |      |     |     |     |     |      |      |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    |       |      |
| Texline.....        | Canadian.     |               |     |    |      | T.   |      |      |     |     |     |     |      |      |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    |       | 0.60 |
| Tulla.....          | Red.....      |               |     |    |      |      |      |      |     |     |     |     |      | .60  |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 0.60  |      |
| Wichita Falls.....  | do.....       |               |     |    |      |      |      |      |     |     |     |     | .50  |      |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 0.50  |      |
| Kansas.             |               |               |     |    |      |      |      |      |     |     |     |     |      |      |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    |       |      |
| Anthony.....        | Arkansas..    |               |     |    |      |      | 2.04 |      |     |     |     |     |      | .15  |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 2.19  |      |
| Ashland.....        | Cimarron..    |               |     |    |      | .02  | .25  | .15  | .13 |     |     |     | .10  | .92  |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 2.57  |      |
| Burlington.....     | Neosho....    |               | .10 |    | .01  | .67  | .10  | .03  |     | .02 |     |     |      |      | .47 |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 1.40  |      |
| Chanute.....        | do.....       |               |     |    |      |      |      |      |     |     |     |     | T.   | 1.00 |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 1.00  |      |
| Cimarron.....       | Cimarron..    |               |     |    |      |      |      |      |     |     |     |     | 1.20 | T.   |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 1.20  |      |
| Coldwater.....      | do.....       | .05           |     |    |      | .04  | .54  | .04  | .04 |     |     |     |      | .19  | .03 |      |    |    |    | T.  |     |     |     |     |    |    |    |    |    |    |    |    | 2.98  |      |
| Columbus.....       | Neosho....    |               | .01 |    | .09  | T.   | .55  |      |     |     |     |     |      | .21  | .19 | .58  |    |    |    | T.  |     | .01 |     |     |    |    |    |    |    |    |    |    | 1.64  |      |
| Coolidge.....       | Arkansas..    |               |     |    |      |      |      |      |     |     |     |     | 1.32 | .20  |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 1.58  |      |
| Cottonwood Falls    | Neosho....    |               | .01 |    | .03  |      | .17  |      |     | .04 | .32 |     |      |      | .01 |      |    |    |    | T.  |     |     |     | .05 |    |    |    |    |    |    |    |    | 0.63  |      |
| Council Grove....   | do.....       |               |     |    |      |      | 1.06 | .02  |     |     |     |     |      |      |     |      |    |    |    |     |     |     | .01 |     |    |    |    |    |    |    |    |    | 1.09  |      |
| Cunningham.....     | Arkansas..    |               |     |    |      |      | 3.30 |      |     |     |     |     | T.   | .35  |     |      |    |    |    | .05 |     |     |     |     |    |    |    |    |    |    |    |    | 3.70  |      |
| Dodge City.....     | do.....       | .07           |     |    | T.   |      | .29  | .19  |     |     |     |     | .59  | .35  |     |      |    |    |    | .01 |     |     |     |     |    |    |    |    |    |    |    |    | 1.50  |      |
| Eldorado.....       | do.....       |               |     |    |      |      | .86  |      |     |     | .02 |     |      |      | T.  |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 0.88  |      |
| Ellinwood.....      | do.....       |               |     | T. | T.   | .22  | .08  | .66  | .01 | .02 | .02 | .93 | 2.54 |      |     |      |    |    |    | T.  | .01 | .23 |     |     |    |    |    |    |    |    |    |    | 5.70  |      |
| Emporia.....        | Neosho....    |               |     | T. |      | .50  | .35  |      |     | .07 | T.  |     |      |      |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 0.92  |      |
| Eureka.....         | Verdigris..   |               |     |    |      |      | .92  |      |     |     |     |     |      |      |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 0.98  |      |
| Fall River.....     | do.....       |               |     |    |      |      | .70  |      |     |     |     |     |      |      | .C1 | .45  |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 1.16  |      |
| Fargo.....          | Cimarron..    |               |     |    |      | .35  | .11  |      |     |     |     |     |      | 1.01 |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 1.50  |      |
| Fredonia.....       | Verdigris..   |               | T.  |    |      | .70  | .02  |      | T.  | T.  |     |     |      | .33  | .53 |      |    |    |    |     |     | .17 |     |     |    |    |    |    |    |    |    |    | 1.75  |      |
| Garden City.....    | Arkansas..    |               |     |    | .35  |      | .15  |      |     | T.  | T.  |     |      | .80  | T.  |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 1.20  |      |
| Great Bend.....     | do.....       |               |     |    |      |      |      |      |     |     |     |     |      |      |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    |       |      |
| Greensburg.....     | do.....       |               |     |    | T.   |      | .01  | .40  | .40 |     |     |     | T.   | 2.05 |     |      |    |    |    | .07 | .24 |     |     |     |    |    |    |    |    |    |    |    | 3.17  |      |
| Grenola.....        | Verdigris..   |               |     |    |      |      | T.   | 2.10 |     |     |     |     |      |      | .04 | .09  |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 2.23  |      |
| Howard.....         | do.....       |               |     |    |      |      | 2.79 | T.   |     |     |     |     |      |      | T.  | .45  |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 3.24  |      |
| Hugoton.....        | Cimarron..    |               |     |    |      |      |      |      |     |     |     |     |      |      | .40 |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 0.40  |      |
| Hutchinson.....     | Arkansas..    |               |     |    | .03  |      | .51  | .32  |     | .02 |     |     |      | 1.10 | .05 |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 1.03  |      |
| Independence.....   | Verdigris..   |               |     |    | 1.45 |      | 1.42 | .05  |     |     |     |     |      |      | .55 |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 4.63  |      |
| Iola.....           | Neosho....    | .01           |     |    |      | .97  | .08  |      |     |     |     |     |      | .33  | .33 |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 1.72  |      |
| Jetmore.....        | Arkansas..    | .10           |     |    | T.   |      | .04  | .22  |     | .19 |     |     |      | .84  | .85 |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 3.25  |      |
| Kingman.....        | do.....       |               |     |    |      | T.   | 1.01 |      |     | T.  |     |     |      | .12  |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 1.73  |      |
| La Crosse.....      | do.....       | T.            |     |    | T.   |      | .03  | .30  |     |     |     |     |      | .33  | .10 |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 3.26  |      |
| Lakin.....          | do.....       |               |     |    | T.   | T.   | .02  |      |     |     |     | T.  |      | .48  | T.  |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 0.50  |      |
| Larned.....         | do.....       |               |     |    |      |      | .07  | .54  | .29 |     | .64 |     |      |      | .03 | 2.28 |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 3.83  |      |
| Lebo.....           | Neosho....    |               |     |    |      | T.   | 2.60 | .05  | .02 | T.  |     |     |      | .28  | .21 |      |    |    |    |     |     | .01 |     |     |    |    |    |    |    |    |    |    | 3.17  |      |
| Le Roy.....         | do.....       | .12           |     |    |      |      | .97  | .05  |     |     | T.  |     |      | .82  |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 1.96  |      |
| Liberal.....        | Cimarron..    |               |     |    |      | T.   | .06  | 1.28 | .30 | T.  |     |     |      | .08  |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 2.95  |      |
| Macpherson          | Arkansas..    |               |     |    | T.   |      | .42  | .13  | T.  | .30 |     |     |      | 2.60 | .19 |      |    |    |    | T.  | .63 |     |     |     |    |    |    |    |    |    |    |    | 3.34  |      |
| McPherson           | do.....       |               |     |    |      |      | .33  | .03  |     |     |     |     |      | .61  |     | .10  |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 2.43  |      |
| Madison.....        | Verdigris..   |               | T.  |    |      |      | .60  | T.   |     |     | T.  |     |      |      | .05 |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 1.07  |      |
| Marion.....         | Neosho....    |               |     |    | T.   | .03  | .46  | .06  | T.  | .04 |     |     |      |      | .03 |      |    |    |    |     |     |     | T.  |     |    |    |    |    |    |    |    |    | 0.65  |      |
| Medicine Lodge..... | Arkansas..    |               |     |    |      | 1.10 |      |      |     |     |     |     |      | T.   | .52 |      |    |    |    | .05 |     |     |     |     |    |    |    |    |    |    |    |    | 0.64  |      |
| Medora.....         | do.....       |               |     |    |      |      |      |      |     |     |     |     |      |      |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 1.67  |      |
| Mt. Hope.....       | do.....       |               |     |    |      |      | 1.63 |      |     |     |     |     |      | .07  |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    |       |      |
| Neosho Rapids.....  | Neosho....    |               |     |    |      |      | 2.02 | .05  |     |     |     |     |      |      | .10 |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 1.70  |      |
| Near City.....      | Arkansas..    |               |     |    |      |      |      |      |     |     |     |     |      |      |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 2.17  |      |
| Newton.....         | do.....       |               |     |    |      |      | .18  | .50  |     | .03 |     |     |      | .05  | .01 |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 0.77  |      |
| Norwich.....        | do.....       |               |     |    |      |      | .21  | .77  |     |     |     |     |      | .11  | .04 |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 1.13  |      |
| Oswego.....         | Neosho....    | .12           | T.  |    |      |      | .67  |      |     |     |     |     |      |      |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 1.13  |      |
| Pratt.....          | Arkansas..    |               |     |    |      |      | 2.25 | .15  |     |     |     |     |      |      |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 1.13  |      |
| Rome.....           | do.....       |               |     |    |      |      | T.   | 1.77 |     |     |     |     |      | .06  |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 2.40  |      |
| Sedan               | Verdigris..   |               |     |    |      |      | 1.90 | .47  |     |     |     |     |      |      | .16 |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 1.83  |      |
| Toronto             | do.....       |               |     |    |      |      | .90  | .30  |     |     |     |     |      | .50  |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 2.43  |      |
| Ulysses.....        | Cimarron..    |               |     |    |      |      | .20  |      |     |     |     |     | .40  |      |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 1.70  |      |
| Walnut.....         | Neosho....    |               |     |    |      | .25  | T.   | T.   |     |     |     |     |      | .40  | .77 |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 0.60  |      |
| Wichita.....        | Arkansas..    |               |     |    |      | .61  | 1.08 |      |     |     |     |     |      | .08  |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 1.42  |      |
| Winfield.....       | do.....       | T.            |     |    |      |      | 3.25 |      |     |     |     |     |      | .10  |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 1.77  |      |
| Yates Center.....   | Verdigris..   |               |     |    |      |      |      |      |     |     |     |     |      |      |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 3.35  |      |
| Oklahoma.           |               |               |     |    |      |      |      |      |     |     |     |     |      |      |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    |       |      |
| Ada.....            | Canadian.     |               |     |    |      |      |      |      |     |     |     |     |      |      |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    |       |      |
| Alva.....           | Arkansas..    |               |     |    |      |      |      |      |     |     |     |     |      |      |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    |       |      |
| Apache.....         | Canadian      |               |     |    |      |      |      |      |     |     |     |     |      | 1.65 | .35 |      |    |    |    |     | .05 |     |     |     |    |    |    |    |    |    |    |    | 2.05  |      |
| Arapaho.....        | Washita..     | .35           |     |    |      | T.   |      |      |     |     |     |     |      | .55  |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 0.90  |      |
| Ardmore             | Red.....      | .15           |     |    |      |      |      |      |     |     |     |     |      | .08  |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 0.23  |      |
| Bartlesville.....   | Arkansas..    |               |     |    |      |      | .58  |      |     |     |     |     |      | .48  | .13 |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 1.10  |      |
| Beaver.....         | Canadian      |               |     |    |      | T.   | .25  | T.   | .47 |     | .01 | .11 | .68  |      |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 1.52  |      |
| Blackburn.....      | Arkansas..    |               |     |    |      |      | .11  |      |     |     |     |     |      | .07  | .65 |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 0.83  |      |
| Buffalo.....        | Cimarron..    |               |     |    |      |      |      |      |     |     |     |     |      |      |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    |       |      |
| Cacbe.....          | Red.....      |               |     |    |      |      | .29  |      |     |     |     |     |      | 1.41 |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 1.70  |      |
| Calvin.....         | Canadian      | .04           |     |    |      | .02  |      | .20  |     |     |     |     |      |      | .17 |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 0.43  |      |
| Chandler            | do.....       | T.            |     |    |      | .24  | T.   |      |     |     |     |     |      | .20  |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 0.47  |      |
| Chattanooga.....    | Red.....      |               |     |    |      |      |      |      |     |     |     |     |      | .59  | .53 |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    | 1.12  |      |
| Chickasha.....      | Washita..     |               |     |    |      |      |      |      |     |     |     |     |      | .40  |     |      |    |    |    |     |     |     |     |     |    |    |    |    |    |    |    |    |       |      |

TABLE 2.—Daily precipitation for September, 1909. District No. 7—Continued.

| Stations.        | River basins. | Day of month. |     |     |      |      |      |      |      |      |     |     |      |        |      |     |    |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    | Total. |
|------------------|---------------|---------------|-----|-----|------|------|------|------|------|------|-----|-----|------|--------|------|-----|----|----|-----|----|-----|------|------|-----|----|----|----|----|----|----|----|----|--------|
|                  |               | 1             | 2   | 3   | 4    | 5    | 6    | 7    | 8    | 9    | 10  | 11  | 12   | 13     | 14   | 15  | 16 | 17 | 18  | 19 | 20  | 21   | 22   | 23  | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |        |
| Oklahoma—Cont'd. |               |               |     |     |      |      |      |      |      |      |     |     |      |        |      |     |    |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    |        |
| Meeker.          | Canadian.     |               |     |     |      | .55  |      |      |      |      |     |     |      | .01    |      |     |    |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    | 0.56   |
| Muskogee.        | Arkansas.     |               |     |     |      |      |      |      |      |      |     |     |      | .42    | .29  |     |    |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    | 0.71   |
| Mutual.          | Canadian.     |               |     |     |      |      |      |      |      |      |     |     |      | .95    |      |     |    |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    | 0.95   |
| Neola.           | Washita.      |               |     |     |      |      |      |      |      |      |     |     | 1.91 |        |      |     |    |    |     |    | .02 |      |      |     |    |    |    |    |    |    |    |    | 1.93   |
| Newkirk.         | Arkansas.     |               |     |     |      |      |      | 1.92 |      |      |     |     |      |        |      |     |    |    |     |    |     | .40  |      |     |    |    |    |    |    |    |    |    | 2.32   |
| Norman.          | Canadian.     | .01           |     |     |      | .21  | .13  |      |      |      |     |     |      | .03    | .23  |     |    |    |     |    |     | .30  |      |     |    |    |    |    |    |    |    |    | 0.81   |
| Okeene.          | Cimarron.     |               |     |     | T.   | .21  |      |      |      |      |     |     |      | .61    | .01  |     |    |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    | 0.83   |
| Oklahoma.        | Canadian.     |               |     |     | .36  | .10  | .04  |      |      |      |     |     |      | .03    |      |     |    |    |     |    |     | T.   |      |     |    |    |    |    |    |    |    |    | 0.53   |
| Okmulgee.        | do.           |               |     |     |      | .04  |      |      |      |      |     |     |      |        |      |     |    |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    | 0.04   |
| Pauls Valley.    | do.           |               |     |     |      |      |      |      |      |      |     |     |      |        |      |     |    |    |     |    | T.  | .47  |      |     |    |    |    |    |    |    |    |    | 0.52   |
| Pawhuska.        | Arkansas.     |               |     |     |      |      |      |      |      |      |     |     |      |        |      |     |    |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    |        |
| Perry.           | do.           |               |     |     |      | .16  |      | T.   |      |      |     |     |      | .24    | .09  |     |    |    |     |    |     | .70  |      |     |    |    |    |    |    |    |    |    | 1.19   |
| Ravia.           | Washita.      |               |     |     |      | .12  | .03  |      |      |      |     |     |      |        | .15  |     |    |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    | 0.30   |
| Sac & Fox Agy.   | Canadian.     |               |     |     |      | .23  |      |      |      |      |     |     |      |        | .15  |     |    |    |     |    |     | .05  |      |     |    |    |    |    |    |    |    |    | 0.43   |
| Shawnee   .      | do.           |               |     | T.  |      | .15  | .43  |      |      |      |     |     |      |        | .04  |     |    |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    | 0.62   |
| Snyder.          | Red.          |               |     |     |      |      |      |      |      |      |     |     |      | .48    |      |     |    |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    | 0.48   |
| Sulwater   .     | Cimarron.     | 1.21          |     |     |      | .19  |      | T.   |      |      |     |     |      |        | .14  |     |    |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    | 1.54   |
| Supply.          | Canadian.     | .10           |     |     | 1.23 | .20  | .10  |      |      |      |     |     | 1.20 |        |      |     |    |    |     |    |     |      | .49  |     |    |    |    |    |    |    |    |    | 3.32   |
| Tulsa (1).       | Arkansas.     | .07           |     |     |      | .04  |      |      |      |      |     |     |      |        | .14  |     |    |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    | 0.25   |
| Tulsa (2)   .    | do.           |               |     |     |      |      |      |      |      |      |     |     |      |        |      |     |    |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    |        |
| Vinita.          | do.           |               | T.  |     |      | .05  |      |      |      | .05  |     |     | T.   |        | 1.00 |     |    |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    | 1.10   |
| Wagoner.         | do.           |               |     |     |      | T.   |      |      |      |      |     |     |      |        |      |     |    |    | .02 |    |     |      |      |     |    |    |    |    |    |    |    |    | 0.02   |
| Waukomis.        | Cimarron.     |               |     |     | T.   | .12  | .25  | T.   |      |      |     |     |      | .52    |      |     |    |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    | 0.89   |
| Weatherford   .  | Canadian.     | .55           | T.  |     |      | 2.19 |      |      |      |      |     |     |      | .07    | .27  |     |    |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    | 3.08   |
| Webbers Falls.   | Arkansas.     | .14           |     |     | .05  |      | .70  |      |      |      |     | .03 | .60  | .05    | .43  |     |    |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    | 2.00   |
| Whiteagle.       | do.           |               |     |     |      | .09  | .15  |      |      |      |     |     |      | .02    |      |     |    |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    | 0.26   |
| Woodward.        | Canadian.     |               |     |     | 3.95 | .63  | T.   | .05  |      |      |     |     |      | .85    |      |     |    |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    | 4.88   |
| Missouri.        |               |               |     |     |      |      |      |      |      |      |     |     |      |        |      |     |    |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    |        |
| Belle.           | Meramec.      |               |     |     |      | T.   |      | 1.11 | .10  | .32  |     |     |      | 1.48   | .33  |     |    |    |     |    |     | .40  |      |     |    |    |    |    |    |    |    |    | 3.74   |
| Birchtree.       | Black.        |               | .30 | .22 |      |      |      | .34  | .27  |      |     |     |      |        | .09  | .35 |    |    |     |    |     | 1.15 | .86  | .10 |    |    |    |    |    |    |    |    | 3.68   |
| Cape Girardeau.  | Mississippi.  |               |     |     |      |      |      |      |      |      |     |     |      |        |      |     |    |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    |        |
| Caruthersville.  | do.           |               |     |     |      | .04  |      | .05  |      |      |     |     | .06  | T.     | 1.51 |     | T. |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    |        |
| Dean.            | Neosho.       |               |     |     |      |      |      | .15  | .49  |      |     |     |      |        | .83  |     |    |    |     |    |     | 2.00 |      |     |    |    |    |    |    |    |    |    | 4.78   |
| Doniphan.        | Black.        |               | T.  | .23 | 1.06 |      |      |      |      |      |     |     |      |        | .50  |     |    |    |     |    |     | 2.00 | .01  |     |    |    |    |    |    |    |    |    | 6.01   |
| Farmington.      | Mississippi.  |               |     |     |      |      |      |      |      | 3.25 | .25 |     |      |        | .44  |     |    |    |     |    |     | 1.08 | .65  |     |    |    |    |    |    |    |    |    | 3.57   |
| Gano.            | Meramec.      |               | .07 |     | .16  |      | 1.09 | .08  | T.   |      |     |     |      |        | .73  |     |    |    |     |    |     | 1.18 | .47  |     |    |    |    |    |    |    |    |    | 4.60   |
| Goodland.        | Black.        |               | .12 | .08 |      |      |      | 1.96 | .06  |      |     |     |      |        |      |     |    |    |     |    |     | 1.91 | T.   |     |    |    |    |    |    |    |    |    | 5.16   |
| Greenville.      | Mississippi.  |               | T.  | T.  |      | .35  | 1.43 | .22  | .70  |      |     |     |      |        | .55  |     |    |    |     |    |     | .05  | 2.15 | T.  |    |    |    |    |    |    |    |    | 6.57   |
| Ironton   .      | do.           |               | .05 | .02 | .90  | T.   | .65  | 1.60 | .70  |      |     |     |      |        | .45  |     |    |    |     |    |     | 2.60 | .75  |     |    |    |    |    |    |    |    |    | 8.36   |
| Jackson.         | do.           |               | .07 |     |      |      | 2.48 | .52  | 1.20 |      |     |     |      |        | .74  |     |    |    |     |    |     | 2.60 | .50  |     |    |    |    |    |    |    |    |    | 1.90   |
| Joplin.          | Neosho.       |               |     |     |      |      |      |      |      |      |     |     |      |        | 1.40 | T.  |    |    |     |    |     | 1.14 | .17  | .63 |    |    |    |    |    |    |    |    | 3.24   |
| Koshkonong.      | Black.        |               | T.  | .38 | .25  |      | T.   | .10  | .03  |      |     |     |      | 1.03   | .11  |     |    |    |     |    |     | T.   | T.   |     |    |    |    |    |    |    |    |    | 1.09   |
| Lamar.           | Neosho.       |               | T.  |     |      |      | T.   | .09  |      |      |     | T.  |      | 1.00   |      |     |    |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    | 5.75   |
| Marble Hill.     | Mississippi.  |               | T.  |     |      |      | 1.36 | .25  | 1.20 |      |     |     |      |        | .55  |     |    |    |     |    |     | 2.00 | .45  |     |    |    |    |    |    |    |    |    | 3.30   |
| Mt. Vernon.      | Neosho.       |               |     |     | .50  | .05  |      | .25  |      |      |     |     |      | 202.25 |      |     |    |    |     |    |     | .05  |      |     |    |    |    |    |    |    |    |    | 2.16   |
| Neosho.          | do.           |               |     |     | .05  |      | .02  | .16  |      |      |     |     |      | T.     | 1.93 |     |    |    |     |    |     | 1.32 | .22  |     |    |    |    |    |    |    |    |    | 6.82   |
| Oakfield.        | Meramec.      |               | T.  | T.  | T.   |      | .04  | 3.07 | .02  | .62  |     |     |      | 1.20   | .33  |     |    |    |     |    |     | 1.10 | .27  |     |    |    |    |    |    |    |    |    | 3.44   |
| Olden.           | White.        |               | .08 | .35 |      |      | .12  |      |      |      |     |     |      | 1.52   |      |     |    |    |     |    |     | 1.10 | .27  |     |    |    |    |    |    |    |    |    | 6.57   |
| Sikeston.        | Mississippi.  |               | T.  | T.  | 1.30 | T.   | 1.50 | .35  | .25  |      |     |     |      |        | .45  |     |    |    |     |    |     | 2.30 | .03  | .42 |    |    |    |    |    |    |    |    | 0.69   |
| Springfield.     | White.        | .04           |     | .20 | .02  |      | .29  |      |      |      |     |     | .01  | .01    | .01  |     |    |    |     |    |     | .08  | .03  |     |    |    |    |    |    |    |    |    | 3.55   |
| Steelville.      | Meramec.      |               |     | .25 |      |      | 1.05 | .25  | T.   |      |     |     |      | 1.35   |      |     |    |    |     |    |     | .65  | T.   |     |    |    |    |    |    |    |    |    | 2.60   |
| Willow Springs.  | White.        |               | T.  | T.  | T.   |      | .55  |      |      |      |     |     |      | 1.19   |      |     |    |    |     |    |     | .64  | .12  |     |    |    |    |    |    |    |    |    |        |
| Kentucky.        |               |               |     |     |      |      |      |      |      |      |     |     |      |        |      |     |    |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    |        |
| Blandville.      | Mississippi.  |               | .03 | .60 |      |      | .84  |      | 1.93 |      |     |     |      |        | .10  |     |    |    |     |    |     | 1.72 | .57  |     |    |    |    |    |    |    |    |    | 5.79   |
| Lynnville.       | do.           |               |     |     | 1.40 |      | .66  | .48  | T.   | 1.31 |     |     |      |        | .44  |     |    |    |     |    |     | 1.36 |      |     |    |    |    |    |    |    |    |    | 5.65   |
| Tennessee.       |               |               |     |     |      |      |      |      |      |      |     |     |      |        |      |     |    |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    |        |
| Arlington   .    | Mississippi.  |               |     |     | .52  |      |      | .25  | T.   |      |     |     |      |        | T.   |     |    |    |     |    |     | .20  | 1.45 | .15 |    |    |    |    |    |    |    |    | 2.57   |
| Bollivar   .     | do.           |               |     |     | .95  |      |      | .50  | .32  |      |     |     |      |        |      |     |    |    |     |    |     | .45  | .88  | T.  |    |    |    |    |    |    |    |    | 3.10   |
| Brownsville   .  | do.           |               |     |     | 1.46 |      |      | .33  | .23  | .60  |     |     |      |        | T.   | .32 |    |    |     |    |     | .67  | .97  | .10 |    |    |    |    |    |    |    |    | 4.68   |
| Covington   .    | do.           |               |     |     | .75  |      |      | .05  | 1.00 |      |     |     |      |        | T.   |     |    |    |     |    |     | 1.00 | .25  | .75 |    |    |    |    |    |    |    |    | 3.80   |
| Dyersburg   .    | do.           |               |     |     |      |      |      | T.   | .57  | .97  |     |     |      |        |      |     |    |    |     |    |     |      |      |     |    |    |    |    |    |    |    |    |        |

| Stations.               | River basins. | Day of month. |   |    |     |      |     |     |     |     |    |     |    |     |      |     |    |    |    |    |      |      |      |     |     |    |    |    |    |    |    | Total. |        |
|-------------------------|---------------|---------------|---|----|-----|------|-----|-----|-----|-----|----|-----|----|-----|------|-----|----|----|----|----|------|------|------|-----|-----|----|----|----|----|----|----|--------|--------|
|                         |               | 1             | 2 | 3  | 4   | 5    | 6   | 7   | 8   | 9   | 10 | 11  | 12 | 13  | 14   | 15  | 16 | 17 | 18 | 19 | 20   | 21   | 22   | 23  | 24  | 25 | 26 | 27 | 28 | 29 | 30 | 31     | Total. |
| <b>Arkansas—Cont'd.</b> |               |               |   |    |     |      |     |     |     |     |    |     |    |     |      |     |    |    |    |    |      |      |      |     |     |    |    |    |    |    |    |        |        |
| Lake Farm.....          | Arkansas.     |               |   |    |     | .24  |     |     |     |     |    |     |    |     |      |     |    |    |    |    | 2.02 | .21  | .20  |     |     |    |    |    |    |    |    | 3.67   |        |
| Lewisville.....         | Red.          |               |   |    |     | .54  |     |     |     |     |    |     |    |     |      | .07 |    |    |    |    | .40  | .45  | .05  |     |     |    |    |    |    |    |    | 1.51   |        |
| Little Rock.....        | Arkansas.     |               |   | T. | .51 | .28  |     |     |     |     |    | T.  | T. |     | .06  |     |    |    |    |    | .43  | .56  | .33  |     |     |    |    |    |    |    |    | 3.17   |        |
| Lutheville.....         | do.           |               |   |    |     | .08  | T.  |     |     |     |    | T.  |    |     |      |     |    |    |    |    |      | .59  |      |     |     |    |    |    |    |    |    | 0.67   |        |
| McNell.....             | Ousachita.    |               |   |    |     | .62  | .15 |     |     |     |    | T.  |    |     | T.   | .10 |    |    |    |    |      | 1.19 | .10  | .37 |     |    |    |    |    |    |    | 2.53   |        |
| Malvern   .....         | Ousachita.    |               |   |    | .03 | 1.35 |     | .04 |     |     |    | .10 |    |     | 1.21 | .07 |    |    |    |    |      | 1.26 | .48  |     |     |    |    |    |    |    |    | 4.54   |        |
| Mammoth Spring.....     | White.        |               |   |    |     | 1.05 |     | .25 |     |     |    |     |    |     |      |     |    |    |    |    |      | 1.96 | .63  |     |     |    |    |    |    |    |    | 3.89   |        |
| Marked Tree   .....     | St Francis.   |               |   |    |     |      |     | .31 |     |     |    |     |    |     |      |     |    |    |    |    |      | .15  |      |     |     |    |    |    |    |    |    | 0.86   |        |
| Mena.....               | Ousachita.    | .03           |   |    |     |      |     |     |     | .37 |    | T.  |    |     |      |     |    |    |    |    |      |      | .61  |     |     |    |    |    |    |    |    |        | 1.76   |
| Mossville.....          | White.        |               |   |    | .80 |      |     |     |     |     |    |     | T. |     | .35  |     |    |    |    |    |      |      |      |     |     |    |    |    |    |    |    | 1.76   |        |
| Mount Nebo.....         | Arkansas.     |               |   |    |     |      |     |     |     |     |    |     |    |     |      |     |    |    |    |    |      |      |      |     |     |    |    |    |    |    |    | 8.05   |        |
| Newport (1)   .....     | White.        |               |   |    |     | 4.27 |     |     |     |     |    |     |    |     | 1.00 | .14 |    |    |    |    | .03  | 1.72 | .35  | .54 |     |    |    |    |    |    |    | 8.05   |        |
| Newport (2)   .....     | do.           |               |   |    |     |      |     |     |     |     |    |     |    |     |      |     |    |    |    |    |      |      |      |     |     |    |    |    |    |    |    | 8.05   |        |
| Osark.....              | Arkansas.     |               |   |    |     | .28  |     |     |     |     |    |     |    |     |      |     |    |    |    |    |      | .22  |      |     |     |    |    |    |    |    |    | 0.50   |        |
| Pine Bluff   .....      | do.           |               |   |    |     |      | .10 |     |     |     |    |     |    |     |      | .05 |    |    |    |    |      | 2.50 | .15  | .70 |     |    |    |    |    |    |    | 3.50   |        |
| Pocahontas.....         | White.        |               |   |    |     | 1.20 |     | .15 | .06 |     |    | .60 |    |     |      |     |    |    |    |    |      | 1.90 |      | .35 |     |    |    |    |    |    |    | 4.26   |        |
| Pond.....               | Arkansas.     | .12           |   | T. |     |      |     |     |     |     |    |     |    | .09 | .06  | .95 |    |    |    |    |      |      |      |     |     |    |    |    |    |    |    | 1.22   |        |
| Portland   .....        | Ousachita.    |               |   |    |     |      |     |     |     |     |    | .30 |    |     |      | .40 |    |    |    |    |      | 12.2 | .10  | .08 | .20 |    |    |    |    |    |    | 3.20   |        |
| Prescott   .....        | do.           |               |   |    |     |      | T.  |     |     |     |    |     | T. | .04 | T.   |     |    |    |    |    |      | T.   | 1.05 | .40 | .05 |    |    |    |    |    |    | 1.54   |        |
| Princeton.....          | do.           |               |   |    |     |      |     |     |     |     |    |     |    |     |      |     |    |    |    |    |      |      |      |     |     |    |    |    |    |    |    | 0.39   |        |
| Rogers.....             | Arkansas.     |               |   | T. |     |      |     |     |     |     |    |     |    |     | .10  | .26 |    |    |    |    |      | .03  |      |     |     |    |    |    |    |    |    |        |        |

TABLE 2.—Daily precipitation for September, 1909. District No. 7—Continued.

| Stations.           | River basins. | Day of month. |     |      |     |     |     |     |      |     |     |     |    |      |      |     |     |     |    |    |      |      |      |     |     |    |    |    |    |    |    |    | Total. |
|---------------------|---------------|---------------|-----|------|-----|-----|-----|-----|------|-----|-----|-----|----|------|------|-----|-----|-----|----|----|------|------|------|-----|-----|----|----|----|----|----|----|----|--------|
|                     |               | 1             | 2   | 3    | 4   | 5   | 6   | 7   | 8    | 9   | 10  | 11  | 12 | 13   | 14   | 15  | 16  | 17  | 18 | 19 | 20   | 21   | 22   | 23  | 24  | 25 | 26 | 27 | 28 | 29 | 30 | 31 |        |
| Louisiana—Cont'd.   |               |               |     |      |     |     |     |     |      |     |     |     |    |      |      |     |     |     |    |    |      |      |      |     |     |    |    |    |    |    |    |    |        |
| Monroe              | Ouachita      |               |     |      |     |     | .32 |     |      |     |     | .12 |    |      | .22  |     |     |     |    |    |      | 1.98 | T.   |     |     |    |    |    |    |    |    |    | 2.54   |
| Morgan City         | Coast         | .52           |     |      |     |     |     |     |      | .34 | .30 |     |    | .20  |      |     | .12 | .38 |    |    |      | .48  | 2.08 |     |     |    |    |    |    |    |    |    | 4.42   |
| Newellton           | Mississippi   |               |     |      |     |     |     |     |      |     | .15 |     |    | .10  |      |     |     |     |    |    |      | T.   | 2.75 |     |     |    |    |    |    |    |    |    | 3.00   |
| New Iberia          | Coast         | T.            | .40 | 1.30 | T.  |     |     | .20 | .10  | .60 |     |     |    | .20  | .30  |     | .20 |     |    |    | 6.50 | 1.00 |      |     |     |    |    |    |    |    |    |    | 10.60  |
| New Orleans (1)     | do            |               | .56 |      |     |     | .25 | T.  | .05  | .05 | T.  |     |    | 1.38 | .78  | .10 |     |     |    |    | .09  | 4.42 | T.   |     |     |    |    |    |    |    |    |    | 7.68   |
| New Orleans (2)     | do            |               | .07 |      |     |     | .07 |     | .41  | .15 |     |     |    | .99  | .19  |     | .01 |     |    |    | 4.65 |      |      |     |     |    |    |    |    |    |    |    | 6.54   |
| New Orleans (3)     | Coast         | 1.08          |     |      | .28 |     |     | .12 |      |     |     |     |    | 1.42 | .98  | .12 |     |     |    |    | .06  | 4.33 |      |     |     |    |    |    |    |    |    |    | 8.39   |
| New Orleans (4)     | do            |               | .04 |      |     |     | .04 | .02 | .36  | .11 |     |     |    | .97  | .17  | .01 |     |     |    |    | .08  | 4.60 | .01  |     |     |    |    |    |    |    |    |    | 6.41   |
| New Orleans (5)     | do            |               | .07 |      |     |     | .56 | C1  | .15  | .20 |     |     |    | .59  | 1.08 |     |     |     |    |    | .06  | 4.34 | .02  |     |     |    |    |    |    |    |    |    | 7.08   |
| New Orleans (6)     | do            |               | .40 |      |     |     | .25 |     | .02  | .05 |     |     |    | 1.10 | .80  | .06 |     |     |    |    | .09  | 4.38 | .02  |     |     |    |    |    |    |    |    |    | 7.08   |
| New Orleans (7)     | do            |               | .45 |      |     |     |     | .01 |      |     |     |     |    | .50  | .03  | .18 |     |     |    |    | .04  | 4.38 |      |     |     |    |    |    |    |    |    |    | 5.59   |
| New Orleans (8)     | do            |               | .33 |      |     |     |     |     | .05  | .05 | .04 |     |    | .30  | .15  | .05 |     |     |    |    | .09  | 3.54 | .01  |     |     |    |    |    |    |    |    |    | 4.61   |
| Opelousas           | do            | .31           |     | .05  |     | .25 |     |     |      | T.  |     |     |    |      |      |     |     |     |    |    | 5.54 |      |      |     |     |    |    |    |    |    |    |    | 6.15   |
| Plain Dealing       | Ouachita      |               |     |      |     |     |     |     |      |     |     | .35 |    |      |      | .08 |     |     |    |    | .35  | .49  |      | .35 |     |    |    |    |    |    |    |    | 1.62   |
| Rayne               | Coast         | T.            |     |      |     |     |     |     | .25  | T.  |     |     |    | T.   |      | .60 |     |     |    |    |      | 2.90 |      |     |     |    |    |    |    |    |    |    | 3.75   |
| Reserve             | do            | .55           |     |      |     |     |     |     |      |     |     |     |    | .84  |      | .42 |     |     |    |    |      | 3.93 |      |     |     |    |    |    |    |    |    |    | 5.74   |
| Robeline            | Red           | .04           |     |      |     |     |     |     |      |     |     |     |    |      |      |     | T.  |     |    |    |      | 1.99 |      |     |     |    |    |    |    |    |    |    | 2.03   |
| Ruston              | Ouachita      |               |     |      |     |     |     |     |      |     |     |     |    |      |      |     |     |     |    |    | .50  | 1.50 |      |     |     |    |    |    |    |    |    |    | 2.00   |
| Schriever           | Coast         | T.            |     |      |     |     |     |     |      |     | .15 |     |    | .10  | .71  |     | .56 | .19 |    |    | 2.10 | 4.83 | T.   |     |     |    |    |    |    |    |    |    | 9.74   |
| Shreveport          | Red           |               |     |      |     | .03 |     |     |      |     |     | .18 | T. |      | .15  |     |     |     |    |    | .48  | .28  | .34  |     |     |    |    |    |    |    |    |    | 1.46   |
| Simmesport          | Red           |               |     |      |     |     |     |     |      |     |     | .34 |    | .04  |      |     |     |     |    |    | .06  | 3.68 | .12  |     | .01 |    |    |    |    |    |    |    | 4.25   |
| Southern Univ. Farm | Coast         |               | .05 |      | T.  |     |     |     | 1.20 | .05 | T.  |     |    | .55  | T.   |     |     |     |    |    | .05  | 4.00 |      |     |     |    |    |    |    |    |    |    | 5.90   |
| St. Francisville    | Mississippi   |               |     |      |     |     |     | .57 |      |     |     |     |    |      |      |     |     |     |    |    |      | a    |      |     |     |    |    |    |    |    |    |    | 14.07  |
| Sugartown           | Red           |               |     |      |     |     |     |     |      |     |     |     |    |      |      |     |     |     |    |    |      | .61  |      |     |     |    |    |    |    |    |    |    | 0.61   |
| Tallulah            | Mississippi   |               |     |      |     | .07 |     |     |      |     | .28 |     |    |      |      |     |     |     |    |    |      | 3.40 |      |     |     |    |    |    |    |    |    |    | 3.75   |

a indicates 13.50.



TABLE 3.—Maximum and minimum temperatures at selected stations, September, 1909. District No. 7, Lower Mississippi Valley.

| Date. | Colorado. |      |            |      |         |      | New Mexico. |      |           |      | Texas.    |      |           |      | Kansas.     |      |            |      |       |      |          |      | Oklahoma. |      |             |      |               |      |
|-------|-----------|------|------------|------|---------|------|-------------|------|-----------|------|-----------|------|-----------|------|-------------|------|------------|------|-------|------|----------|------|-----------|------|-------------|------|---------------|------|
|       | Lamar.    |      | Leadville. |      | Pueblo. |      | Albert.     |      | Cimarron. |      | Amarillo. |      | Paris. §§ |      | Dodge City. |      | Ellinwood. |      | Iola. |      | Liberty. |      | Wichita.  |      | Ardmore. §§ |      | Bartlesville. |      |
|       | Max.      | Min. | Max.       | Min. | Max.    | Min. | Max.        | Min. | Max.      | Min. | Max.      | Min. | Max.      | Min. | Max.        | Min. | Max.       | Min. | Max.  | Min. | Max.     | Min. | Max.      | Min. | Max.        | Min. | Max.          | Min. |
| 1...  | 100       | 64   | 64         | 42   | 89      | 59   | 96          | 85   | 86        | 47   | 95        | 82   | 96        | 71   | 94          | 70   | 90         | 67   | 88    | 67   |          |      | 87        | 68   | 97          | 69   | 96            | 68   |
| 2...  | 98        | 60   | 67         | 43   | 82      | 59   | 98          | 88   | 86        | 49   | 95        | 88   | 99        | 72   | 96          | 73   | 94         | 69   | 95    | 69   |          |      | 95        | 74   | 100         | 70   | 98            | 71   |
| 3...  | 92        | 64   | 63         | 40   | 87      | 59   | 92          | 89   | 83        | 52   | 92        | 85   | 99        | 72   | 100         | 67   | 95         | 64   | 96    | 68   |          |      | 96        | 68   | 100         | 72   | 102           | 73   |
| 4...  | 83        | 61   | 59         | 38   | 70      | 56   | 83          | 82   | 69        | 49   | 90        | 85   | 100       | 73   | 79          | 63   | 85         | 66   | 90    | 65   |          |      | 88        | 66   | 100         | 72   | 104           | 78   |
| 5...  | 66        | 51   | 51         | 40   | 56      | 51   | 91          | 59   | 65        | 53   | 70        | 60   | 99        | 74   | 76          | 54   | 80         | 51   | 78    | 57   |          |      | 80        | 56   | 93          | 69   | 84            | 64   |
| 6...  | 78        | 57   | 54         | 39   | 71      | 54   | 79          | 59   | 73        | 55   | 88        | 62   | 98        | 73   | 90          | 65   | 88         | 63   | 87    | 62   |          |      | 86        | 64   | 97          | 70   | 93            | 65   |
| 7...  | 75        | 58   | 57         | 40   | 73      | 58   | 81          | 60   | 76        | 40   | 87        | 65   | 100       | 71   | 70          | 59   | 73         | 61   | 83    | 68   |          |      | 80        | 67   | 101         | 71   | 82            | 70   |
| 8...  | 85        | 62   | 58         | 37   | 80      | 54   | 85          | 61   | 77        | 47   | 88        | 62   | 101       | 71   | 88          | 63   | 89         | 63   | 93    | 68   |          |      | 90        | 66   | 100         | 69   | 98            | 74   |
| 9...  | 87        | 61   | 64         | 32   | 77      | 55   | 85          | 59   | 72        | 49   | 87        | 60   | 102       | 71   | 92          | 60   | 94         | 67   | 95    | 70   |          |      | 93        | 68   | 101         | 70   | 101           | 73   |
| 10... | 92        | 60   | 61         | 34   | 82      | 55   | 83          | 60   | 70        | 50   | 89        | 62   | 105       | 72   | 93          | 67   | 95         | 63   | 95    | 68   |          |      | 92        | 70   | 105         | 69   | 101           | 68   |
| 11... | 93        | 60   | 61         | 35   | 85      | 61   | 81          | 61   | 70        | 48   | 90        | 66   | 106       | 73   | 95          | 68   | 98         | 65   | 99    | 68   |          |      | 95        | 71   | 105         | 72   | 102           | 67   |
| 12... | 87        | 60   | 56         | 34   | 67      | 45   | 84          | 63   | 72        | 50   | 85        | 67   | 103       | 74   | 91          | 64   | 95         | 64   | 97    | 76   |          |      | 96        | 75   | 102         | 74   | 101           | 74   |
| 13... | 64        | 48   | 43         | 26   | 56      | 43   | 86          | 51   | 63        | 42   | 89        | 49   | 99        | 73   | 70          | 53   | 75         | 64   | 93    | 68   |          |      | 82        | 65   | 99          | 75   | 97            | 73   |
| 14... | 78        | 43   | 53         | 25   | 74      | 43   | 78          | 46   | 68        | 37   | 76        | 46   | 86        | 72   | 74          | 51   | 75         | 53   | 73    | 60   |          |      | 74        | 57   | 81          | 62   | 79            | 65   |
| 15... | 84        | 45   | 63         | 29   | 77      | 44   | 78          | 55   | 71        | 40   | 77        | 48   | 91        | 63   | 80          | 51   | 81         | 51   | 70    | 54   |          |      | 80        | 53   | 85          | 59   | 81            | 55   |
| 16... | 87        | 46   | 64         | 32   | 81      | 48   | 79          | 49   | 72        | 41   | 89        | 52   | 91        | 62   | 85          | 55   | 90         | 56   | 84    | 49   |          |      | 86        | 55   | 90          | 59   | 86            | 51   |
| 17... | 83        | 45   | 62         | 31   | 77      | 44   | 77          | 49   | 74        | 38   | 78        | 50   | 92        | 61   | 83          | 52   | 87         | 53   | 89    | 56   |          |      | 88        | 50   | 93          | 56   | 93            | 57   |
| 18... | 89        | 59   | 53         | 33   | 81      | 52   | 86          | 53   | 76        | 41   | 85        | 61   | 94        | 58   | 84          | 62   | 84         | 57   | 88    | 59   |          |      | 85        | 61   | 93          | 55   | 92            | 60   |
| 19... | 81        | 49   | 56         | 33   | 82      | 46   | 89          | 56   | 78        | 45   | 88        | 60   | 98        | 59   | 86          | 56   | 90         | 59   | 88    | 64   |          |      | 87        | 64   | 96          | 67   | 92            | 62   |
| 20... | 91        | 57   | 60         | 35   | 84      | 52   | 87          | 54   | 80        | 42   | 86        | 56   | 94        | 65   | 86          | 58   | 88         | 57   | 89    | 64   |          |      | 88        | 63   | 94          | 64   | 93            | 62   |
| 21... | 79        | 53   | 54         | 40   | 73      | 44   | 91          | 56   | 81        | 46   | 91        | 58   | 96        | 68   | 82          | 58   | 90         | 60   | 87    | 62   |          |      | 87        | 65   | 97          | 63   | 94            | 62   |
| 22... | 80        | 40   | 44         | 17   | 57      | 44   | 73          | 46   | 66        | 35   | 68        | 48   | 96        | 69   | 67          | 47   | 72         | 53   | 69    | 53   |          |      | 70        | 55   | 81          | 73   | 74            | 61   |
| 23... | 86        | 45   | 57         | 22   | 66      | 36   | 71          | 42   | 68        | 32   | 74        | 45   | 86        | 56   | 74          | 47   | 78         | 44   | 74    | 44   |          |      | 75        | 45   | 80          | 52   | 77            | 46   |
| 24... | 84        | 40   | 59         | 25   | 76      | 39   | 78          | 44   | 79        | 36   | 78        | 50   | 86        | 51   | 80          | 47   | 84         | 42   | 79    | 45   |          |      | 81        | 51   | 86          | 47   | 84            | 45   |
| 25... | 85        | 42   | 66         | 34   | 79      | 42   | 81          | 44   | 79        | 41   | 79        | 49   | 86        | 51   | 81          | 56   | 85         | 48   | 79    | 49   |          |      | 81        | 52   | 86          | 48   | 83            | 46   |
| 26... | 83        | 58   | 65         | 32   | 81      | 46   | 75          | 45   | 73        | 39   | 76        | 47   | 82        | 51   | 78          | 48   | 80         | 46   | 72    | 46   |          |      | 74        | 51   | 80          | 49   | 75            | 46   |
| 27... | 82        | 51   | 67         | 33   | 75      | 45   | 75          | 43   | 73        | 34   | 75        | 46   | 81        | 47   | 74          | 45   | 77         | 41   | 71    | 40   |          |      | 71        | 44   | 78          | 46   | 73            | 42   |
| 28... | 82        | 37   | 68         | 34   | 81      | 42   | 83          | 46   | 77        | 38   | 81        | 46   | 82        | 46   | 82          | 47   | 87         | 40   | 78    | 36   |          |      | 80        | 45   | 83          | 41   | 73            | 40   |
| 29... | 85        | 38   | 67         | 37   | 79      | 45   | 85          | 53   | 81        | 41   | 86        | 46   | 91        | 46   | 85          | 47   | 91         | 44   | 88    | 48   |          |      | 88        | 51   | 90          | 44   | 82            | 48   |
| 30... | 88        | 46   | 64         | 33   | 81      | 45   | 84          | 51   | 81        | 42   | 84        | 52   | 93        | 48   | 85          | 49   | 91         | 45   | 84    | 53   |          |      | 87        | 58   | 93          | 51   | 92            | 48   |
| Mns   | 84.2      | 52.0 | 59.3       | 33.6 | 76.3    | 48.9 | 83.1        | 54.3 | 74.6      | 43.6 | 82.9      | 55.8 | 94.4      | 63.7 | 83.3        | 57.0 | 86.0       | 56.0 | 85.2  | 58.5 |          |      | 84.7      | 60.3 | 92.9        | 61.9 | 89.7          | 60.5 |

| Date. | Oklahoma. |      |             |      |            |      |           |      |           |      |                 |      | Missouri. |      |                 |      |             |      |           |      |        |      | Lynnville, Ky. |      |                |      | Jackson, Tenn. |      |  |  |
|-------|-----------|------|-------------|------|------------|------|-----------|------|-----------|------|-----------------|------|-----------|------|-----------------|------|-------------|------|-----------|------|--------|------|----------------|------|----------------|------|----------------|------|--|--|
|       | Enid. §§  |      | McAllister. |      | Mangum. §§ |      | Muskogee. |      | Oklahoma. |      | Weatherford. §§ |      | Woodward. |      | Caruthersville. |      | Ironton. §§ |      | Lamar. §§ |      | Olden. |      | Springfield.   |      | Lynnville, Ky. |      | Jackson, Tenn. |      |  |  |
|       | Max.      | Min. | Max.        | Min. | Max.       | Min. | Max.      | Min. | Max.      | Min. | Max.            | Min. | Max.      | Min. | Max.            | Min. | Max.        | Min. | Max.      | Min. | Max.   | Min. | Max.           | Min. | Max.           | Min. | Max.           | Min. |  |  |
| 1...  | 96        | 68   |             |      | 97         | 72   | 97        | 73   | 92        | 68   | 98              | 69   | 97        | 70   |                 |      | 85          | 53   | 98        | 65   | 89     | 53   | 90             | 66   | 83             | 56   | 96             | 61   |  |  |
| 2...  | 100       | 69   |             |      | 98         | 70   | 101       | 76   | 97        | 69   | 100             | 73   | 102       | 74   |                 |      | 81          | 49   | 91        | 65   | 82     | 57   | 80             | 61   | 87             | 55   | 94             | 56   |  |  |
| 3...  | 102       | 66   |             |      | 98         | 69   | 106       | 75   | 97        | 73   | 100             | 73   | 101       | 71   |                 |      | 97          | 63   | 103       | 65   | 95     | 60   | 96             | 73   | 91             | 65   | 97             | 68   |  |  |
| 4...  | 102       | 70   |             |      | 94         | 70   | 105       | 74   | 98        | 69   | 101             | 71   | 99        | 66   |                 |      | 94          | 66   | 100       | 69   | 90     | 70   | 95             | 67   | 90             | 75   | 97             | 78   |  |  |
| 5...  | 79        | 61   |             |      | 100        | 62   | 89        | 66   | 77        | 65   | 77              | 63   | 78        | 60   |                 |      | 80          | 62   | 80        | 61   | 75     | 63   | 72             | 61   | 80             | 66   | 88             | 70   |  |  |
| 6...  | 93        | 64   |             |      | 92         | 62   | 94        | 67   | 92        | 68   | 93              | 66   | 93        | 63   |                 |      | 84          | 48   | 89        | 61   | 80     | 57   | 80             | 61   | 83             | 55   | 88             | 60   |  |  |
| 7...  | 92        | 68   |             |      | 100        | 68   | 99        | 69   | 97        | 70   | 96              | 74   | 91        | 69   |                 |      | 87          | 58   | 78        | 65   | 74     | 65   | 75             | 69   | 73             | 63   | 85             | 63   |  |  |
| 8...  | 97        | 68   |             |      | 98         | 69   | 102       | 72   | 95        | 70   | 95              | 70   | 97        | 68   |                 |      | 85          | 63   | 89        | 70   | 87     | 64   | 92             | 67   | 82             | 67   | 83             | 70   |  |  |
| 9...  | 100       | 66   |             |      | 99         | 63   | 104       | 74   | 97        | 72   | 100             | 68   | 98        | 62   |                 |      | 95          | 70   | 99        | 68   | 96     | 70   | 94             | 72   | 93             | 69   | 97             | 69   |  |  |
| 10... | 101       | 65   |             |      | 101        | 67   | 106       | 70   | 99        | 71   | 102             | 69   | 99        | 68   |                 |      | 91          | 65   | 102       | 65   | 97     | 66   | 94             | 72   | 88             | 68   | 97             | 67   |  |  |
| 11... | 101       | 65   |             |      | 100        | 65   | 107       | 72   | 100       | 73   | 101             | 72   | 98        | 76   |                 |      | 91          | 65   | 104       | 69   | 90     | 68   | 93             | 72   | 88             | 64   | 93             | 69   |  |  |
| 12... | 101       | 68   |             |      | 101        | 66   | 104       | 73   | 97        | 74   | 98              | 78   | 96        | 75   |                 |      | 92          | 61   | 102       | 72   | 94     | 66   | 93             | 72   | 91             | 64   | 96             | 65   |  |  |
| 13... | 82        | 67   |             |      | 75         | 68   | 94        | 71   | 82        | 66   | 86              | 69   | 86        | 65   |                 |      | 91          | 63   | 97        | 73   | 92     | 70   | 89             | 67   | 90             | 70   | 94             | 70   |  |  |
| 14... | 79        | 56   |             |      | 78         | 52   | 84        | 55   | 77        | 56   | 78              | 51   | 86        | 51   |                 |      | 88          | 66   | 81        | 68   | 89     | 67   | 76             | 62   | 88             | 69   | 80             | 67   |  |  |
| 15... | 81        | 52   |             |      | 82         | 52   | 94        | 72   | 81        | 54   | 80              | 55   | 81        | 48   |                 |      | 80          | 60   | 83        | 54   | 78     | 58   | 76             | 55   | 79             | 67   | 87             | 67   |  |  |
| 16... | 88        | 50   |             |      | 88         | 52   | 95        | 68   | 85        | 55   | 86              | 52   | 87        | 52   |                 |      | 80          | 45   | 87        | 47   | 79     | 59   | 80             | 51   | 77             | 56   | 85             | 57   |  |  |
| 17... | 90        | 53   |             |      | 90         | 52   | 94        | 51   | 89        | 60   | 90              | 54   | 87        | 53   |                 |      | 83          | 44   | 84        | 56   | 82     | 51   | 85             | 60   | 80             | 49   | 87             | 51   |  |  |
| 18... | 90        | 55   |             |      | 91         | 52   | 93        | 50   | 89        | 59   | 88              | 65   | 86        | 58   |                 |      | 86          | 46   | 91        | 59   | 84     | 54   | 84             | 61   | 83             |      |                |      |  |  |

TABLE 3.—Maximum and minimum temperatures at selected stations, September, 1909. District No. 7—Continued.

| Date. | Tennessee. |      |             |      | Arkansas.    |      |          |      |                |      |              |      |             |      |              |      |                |      |               |      | Mississippi. |      |                |      |             |      |                |      |
|-------|------------|------|-------------|------|--------------|------|----------|------|----------------|------|--------------|------|-------------|------|--------------|------|----------------|------|---------------|------|--------------|------|----------------|------|-------------|------|----------------|------|
|       | Memphis.   |      | Union City. |      | Bentonville. |      | Corning. |      | Dardanelle. §§ |      | Eldorado. §§ |      | Fort Smith. |      | Little Rock. |      | Pine Bluff. §§ |      | Texarkana. §§ |      | Wynne. §§    |      | Clarksdale. §§ |      | Corinth. §§ |      | Greenville. §§ |      |
|       | Max.       | Min. | Max.        | Min. | Max.         | Min. | Max.     | Min. | Max.           | Min. | Max.         | Min. | Max.        | Min. | Max.         | Min. | Max.           | Min. | Max.          | Min. | Max.         | Min. | Max.           | Min. | Max.        | Min. | Max.           | Min. |
| 1...  | 92         | 69   | 89          | 63   | 93           | 71   | 88       | 56   | 100            | 63   | 99           | 66   | 87          | 74   | 93           | 69   | 100            | 63   | 101           | 68   | 94           | 57   | 94             | 60   | 94          | 70   | 96             | 64   |
| 2...  | 88         | 63   | 82          | 63   | 92           | 71   | 84       | 54   | 99             | 68   | 99           | 63   | 87          | 71   | 93           | 66   | 98             | 64   | 102           | 69   | 96           | 62   | 97             | 60   | 95          | 62   | 99             | 68   |
| 3...  | 94         | 77   | 94          | 54   | 100          | 70   | 99       | 70   | 104            | 69   | 98           | 70   | 101         | 74   | 98           | 74   | 100            | 70   | 100           | 73   | 103          | 64   | 98             | 68   | 93          | 65   | 98             | 71   |
| 4...  | 88         | 72   | 96          | 73   | 98           | 70   | 97       | 78   | 100            | 70   | 99           | 74   | 98          | 76   | 96           | 68   | 100            | 72   | 100           | 74   | 101          | 76   | 98             | 72   | 96          | 71   | 99             | 73   |
| 5...  | 75         | 67   | 90          | 64   | 79           | 67   | 91       | 67   | 95             | 73   | 96           | 70   | 78          | 69   | 74           | 69   | 83             | 72   | 95            | 72   | 74           | 69   | 84             | 72   | 86          | 71   | 93             | 72   |
| 6...  | 83         | 64   | 86          | 55   | 89           | 64   | 82       | 56   | 91             | 66   | 92           | 67   | 90          | 67   | 85           | 67   | 93             | 65   | 96            | 69   | 86           | 62   | 92             | 64   | 78          | 62   | 95             | 68   |
| 7...  | 78         | 72   | 90          | 56   | 83           | 71   | 80       | 64   | 96             | 68   | 98           | 70   | 96          | 71   | 93           | 73   | 100            | 66   | 102           | 70   | 82           | 74   | 96             | 65   | 86          | 66   | 99             | 72   |
| 8...  | 90         | 71   | 92          | 69   | 96           | 69   | 89       | 68   | 104            | 76   | 100          | 71   | 99          | 72   | 94           | 72   | 102            | 70   | 104           | 75   | 95           | 70   | 100            | 68   | 89          | 70   | 100            | 71   |
| 9...  | 93         | 76   | 94          | 70   | 97           | 71   | 94       | 69   | 101            | 71   | 100          | 73   | 99          | 72   | 97           | 76   | 104            | 70   | 101           | 74   | 100          | 71   | 101            | 70   | 86          | 70   | 101            | 72   |
| 10... | 92         | 75   | 90          | 69   | 100          | 68   | 93       | 69   | 104            | 69   | 103          | 73   | 102         | 72   | 97           | 74   | 102            | 73   | 108           | 73   | 99           | 74   | 101            | 74   | 94          | 67   | 102            | 74   |
| 11... | 93         | 74   | 92          | 67   | 101          | 71   | 92       | 70   | 102            | 70   | 100          | 73   | 104         | 75   | 90           | 74   | 100            | 70   | 98            | 75   | 94           | 72   | 98             | 69   | 88          | 68   | 98             | 69   |
| 12... | 92         | 73   | 94          | 63   | 98           | 72   | 94       | 67   | 102            | 73   | 99           | 72   | 100         | 74   | 93           | 75   | 98             | 70   | 98            | 75   | 95           | 72   | 99             | 70   | 90          | 68   | 99             | 70   |
| 13... | 91         | 76   | 92          | 69   | 95           | 69   | 94       | 70   | 98             | 71   | 97           | 71   | 95          | 74   | 92           | 73   | 98             | 67   | 96            | 73   | 95           | 73   | 95             | 70   | 92          | 70   | 96             | 69   |
| 14... | 89         | 73   | 89          | 68   | 93           | 69   | 94       | 70   | 93             | 70   | 95           | 70   | 80          | 68   | 89           | 70   | 88             | 66   | 92            | 75   | 92           | 70   | 94             | 68   | 88          | 68   | 94             | 67   |
| 15... | 77         | 66   | 80          | 68   | 78           | 57   | 84       | 67   | 87             | 67   | 82           | 70   | 85          | 64   | 80           | 69   | 84             | 66   | 86            | 70   | 80           | 70   | 82             | 68   | 88          | 70   | 88             | 69   |
| 16... | 78         | 60   | 82          | 56   | 81           | 49   | 79       | 55   | 96             | 55   | 84           | 64   | 87          | 62   | 81           | 63   | 86             | 60   | 85            | 64   | 81           | 55   | 85             | 63   | 86          | 64   | 87             | 65   |
| 17... | 81         | 59   | 87          | 49   | 86           | 53   | 82       | 49   | 93             | 50   | 86           | 58   | 89          | 58   | 83           | 68   | 90             | 50   | 86            | 58   | 83           | 47   | 85             | 51   | 82          | 55   | 88             | 60   |
| 18... | 84         | 63   | 89          | 52   | 88           | 59   | 86       | 57   | 93             | 51   | 90           | 55   | 89          | 61   | 86           | 63   | 94             | 53   | 89            | 58   | 83           | 50   | 92             | 52   | 83          | 58   | 93             | 59   |
| 19... | 91         | 69   | 92          | 57   | 88           | 58   | 90       | 56   | 93             | 51   | 91           | 61   | 90          | 62   | 88           | 65   | 96             | 60   | 93            | 61   | 90           | 54   | 94             | 55   | 88          | 60   | 94             | 60   |
| 20... | 84         | 70   | 85          | 66   | 87           | 66   | 87       | 67   | 95             | 51   | 77           | 70   | 88          | 71   | 82           | 68   | 82             | 68   | 88            | 66   | 84           | 69   | 84             | 71   | 88          | 70   | 79             | 71   |
| 21... | 73         | 63   | 75          | 63   | 84           | 66   | 80       | 63   | 84             | 67   | 88           | 66   | 91          | 70   | 84           | 64   | 82             | 62   | 90            | 68   | 78           | 64   | 78             | 64   | 81          | 65   | 85             | 66   |
| 22... | 86         | 67   | 87          | 68   | 78           | 55   | 87       | 66   | 94             | 66   | 92           | 67   | 89          | 65   | 90           | 65   | 84             | 70   | 98            | 70   | 88           | 65   | 91             | 69   | 78          | 67   | 91             | 67   |
| 23... | 71         | 58   | 83          | 60   | 72           | 47   | 83       | 68   | 79             | 56   | 79           | 65   | 76          | 57   | 73           | 61   | 80             | 63   | 80            | 67   | 74           | 61   | 80             | 64   | 86          | 63   | 74             | 64   |
| 24... | 70         | 53   | 77          | 45   | 78           | 43   | 76       | 43   | 82             | 46   | 78           | 49   | 81          | 48   | 74           | 54   | 79             | 53   | 78            | 52   | 73           | 45   | 78             | 51   | 70          | 48   | 76             | 52   |
| 25... | 70         | 53   | 76          | 50   | 75           | 48   | 70       | 46   | 78             | 46   | 76           | 49   | 81          | 50   | 72           | 56   | 80             | 49   | 78            | 52   | 72           | 48   | 75             | 52   | 70          | 48   | 78             | 52   |
| 26... | 68         | 52   | 72          | 48   | 70           | 42   | 68       | 48   | 75             | 46   | 74           | 48   | 76          | 50   | 69           | 54   | 75             | 50   | 75            | 52   | 70           | 51   | 73             | 51   | 74          | 49   | 76             | 52   |
| 27... | 63         | 47   | 68          | 43   | 71           | 40   | 67       | 44   | 74             | 43   | 70           | 45   | 75          | 46   | 66           | 50   | 74             | 48   | 71            | 49   | 65           | 42   | 67             | 48   | 70          | 46   | 70             | 49   |
| 28... | 67         | 47   | 74          | 39   | 76           | 37   | 72       | 36   | 79             | 38   | 73           | 41   | 77          | 42   | 70           | 46   | 76             | 42   | 74            | 42   | 71           | 38   | 73             | 42   | 64          | 41   | 74             | 46   |
| 29... | 74         | 53   | 80          | 43   | 85           | 45   | 80       | 45   | 89             | 39   | 81           | 42   | 86          | 44   | 79           | 48   | 76             | 40   | 82            | 46   | 79           | 41   | 80             | 40   | 70          | 41   | 80             | 46   |
| 30... | 78         | 56   | 82          | 46   | 88           | 50   | 79       | 45   | 96             | 39   | 87           | 48   | 91          | 50   | 85           | 58   | 90             | 48   | 88            | 46   | 82           | 49   | 86             | 41   | 76          | 43   | 86             | 47   |
| Mns   | 81.7       | 64.7 | 85.6        | 58.5 | 86.0         | 59.3 | 84.7     | 59.6 | 91.9           | 59.6 | 89.4         | 62.7 | 89.2        | 63.6 | 84.9         | 64.7 | 90.1           | 61.3 | 91.1          | 64.5 | 85.3         | 60.5 | 88.3           | 61.1 | 83.6        | 61.2 | 89.6           | 63.5 |

| Date. | Mississippi.  |      |             |      |            |      |                |      | Louisiana.      |      |               |      |               |      |                  |      |            |      |              |      |              |      |               |      |             |      |
|-------|---------------|------|-------------|------|------------|------|----------------|------|-----------------|------|---------------|------|---------------|------|------------------|------|------------|------|--------------|------|--------------|------|---------------|------|-------------|------|
|       | Kosciusko. §§ |      | Natchez. §§ |      | Vicksburg. |      | Alexandria. §§ |      | Baton Rouge. §§ |      | Covington. §§ |      | Lafayette. §§ |      | Lake Charles. §§ |      | Monroe. §§ |      | New Orleans. |      | Robeline. §§ |      | Schriever. §§ |      | Shreveport. |      |
|       | Max.          | Min. | Max.        | Min. | Max.       | Min. | Max.           | Min. | Max.            | Min. | Max.          | Min. | Max.          | Min. | Max.             | Min. | Max.       | Min. | Max.         | Min. | Max.         | Min. | Max.          | Min. | Max.        | Min. |
| 1...  | 95            | 66   | 98          | 72   | 94         | 71   | 97             | 69   | 97              | 76   | 92            | 69   | 95            | 71   | 100              | 71   | 98         | 70   | 92           | 77   | 98           | 68   | 98            | 70   | 98          | 73   |
| 2...  | 91            | 67   | 97          | 72   | 94         | 72   | 96             | 70   | 96              | 74   | 91            | 71   | 93            | 73   | 99               | 70   | 96         | 70   | 91           | 76   | 100          | 69   | 99            | 70   | 96          | 74   |
| 3...  | 94            | 69   | 97          | 73   | 91         | 72   | 96             | 70   | 96              | 72   | 92            | 71   | 90            | 72   | 94               | 69   | 94         | 72   | 92           | 77   | 102          | 70   | 97            | 70   | 95          | 75   |
| 4...  | 94            | 71   | 95          | 72   | 90         | 73   | 98             | 70   | 94              | 72   | 95            | 70   | 90            | 71   | 96               | 65   | 94         | 71   | 93           | 77   | 98           | 70   | 98            | 69   | 94          | 75   |
| 5...  | 94            | 68   | 100         | 73   | 95         | 75   | 96             | 72   | 96              | 72   | 95            | 71   | 93            | 69   | 93               | 65   | 95         | 72   | 90           | 77   | 96           | 69   | 98            | 69   | 93          | 73   |
| 6...  | 90            | 68   | 97          | 71   | 98         | 71   | 98             | 67   | 99              | 73   | 96            | 72   | 94            | 70   | 97               | 65   | 91         | 70   | 92           | 76   | 93           | 67   | 100           | 70   | 92          | 72   |
| 7...  | 96            | 68   | 100         | 73   | 95         | 74   | 98             | 69   | 98              | 71   | 95            | 71   | 95            | 73   | 98               | 66   | 92         | 71   | 88           | 78   | 100          | 67   | 96            | 71   | 96          | 74   |
| 8...  | 95            | 69   | 99          | 74   | 95         | 74   | 98             | 70   | 94              | 73   | 92            | 72   | 94            | 72   | 96               | 67   | 97         | 74   | 89           | 78   | 101          | 70   | 98            | 70   | 96          | 76   |
| 9...  | 97            | 69   | 100         | 74   | 95         | 73   | 96             | 72   | 92              | 72   | 93            | 73   | 91            | 74   | 93               | 65   | 97         | 75   | 91           | 79   | 103          | 70   | 98            | 73   | 97          | 76   |
| 10... | 92            | 71   | 99          | 74   | 94         | 73   | 99             | 73   | 95              | 71   | 96            | 72   | 94            | 71   | 100              | 65   | 98         | 76   | 96           | 79   | 100          | 70   | 97            | 71   | 99          | 76   |
| 11... | 96            | 66   | 95          | 70   | 93         | 70   | 99             | 69   | 99              | 72   | 96            | 72   | 93            | 73   | 100              | 67   | 95         | 63   | 91           | 78   | 102          | 71   | 98            | 70   | 97          | 75   |
| 12... | 95            | 67   | 98          | 71   | 95         | 76   | 99             | 69   | 93              | 70   | 94            | 72   | 94            | 71   | 98               | 67   | 96         | 73   | 92           | 78   | 100          | 72   | 99            | 71   | 96          | 75   |
| 13... | 90            | 68   | 90          | 72   | 90         | 70   | 95             | 70   | 89              | 71   | 91            | 70   | 91            | 70   | 91               | 67   | 90         | 70   | 86           | 74   | 98           | 69   | 94            | 69   | 93          | 73   |
| 14... | 86            | 67   | 94          | 66   | 88         | 69   | 87             | 68   | 92              | 67   | 94            | 68   | 92            | 69   | 96               | 67   | 90         | 70   | 88           | 74   | 94           | 68   | 94            | 67   | 92          | 72   |
| 15... | 89            | 67   | 94          | 70   | 91         | 71   | 96             | 68   | 95              | 69   | 94            | 68   | 93            | 70   | 97               | 68   | 92         | 71   | 89           | 76   | 96           | 68   | 95            | 67   | 97          | 71   |
| 16... | 84            | 68   | 85          | 71   | 83         | 68   | 87             | 69   | 85              | 69   | 82            | 69   | 87            | 71   | 91               | 68   | 88         | 67   | 85           | 74   | 89           | 67   | 90            | 69   | 85          | 68   |
| 17... | 86            | 61   | 88          | 65   | 85         | 62   | 91             | 62   | 89              | 67   | 92            | 69   | 90            | 68   | 92               | 65   | 88         | 61   | 87           | 74   | 90           | 56   | 92            | 68   | 86          | 62   |